-Form 3160-3 (November 1983) (formerly 9-331C)

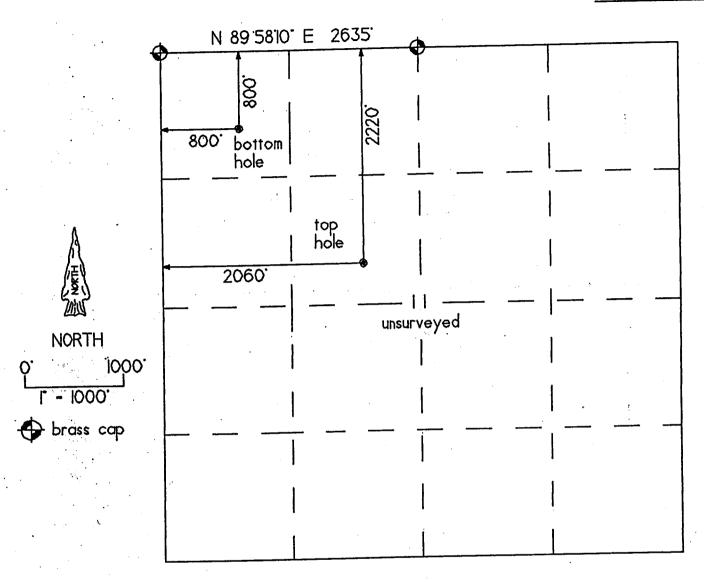
# DIVITED STATES DEPARTMENT OF THE INTERIOR

(Other inst. ons on reverse was)

Form approved.
Budget Bureau No. 1004-0136
Expires August 31, 1985

	DEPARTMEN BUREAU OF		5. LEASE DESIGNATION AND SERIAL NO. UTU-65972			
APPLICATIO	N FOR PERMIT	TO DRILL, I	DEEP	EN, OR PLUG E	ACK	6. IF INDIAN, ALLOTTED OR TRIBE NAME
Ia. TIPE OF WORK						7. UNIT AGREEMENT NAME
b. TIPE OF WELL	ILL 🗆 X	DEEPEN		PLUG BA		Kane Springs Federal Unit
WELL XX W	VELL OTHER			ONE D MULTIP	L .	6. FARM OR LEASE NAME
2. NAME OF OPERATOR	0					Kane Springs
Aviara Energy 3. Address of Operator	Corporation		·		•	No. 11-1
P. O. Box 13	350, Houston,	TX 77251-				10. FIELD AND POOL, OR WILDCAT
4. LOCATION OF WELL (R At surface	eport location clearly and	I in accordance wit	-			Wildcat
	& 2060' FWL Sec	. 11, 1265,	KISE			11. SHC., T., R., M., OR BLK. AND SURVEY OR AREA
At proposed prod. 202 800' FNL 8	& 800' FWL Sec	. 11, T26S,	R19	CONFINE	ITIAI	Sec. 11, T26S, R19E
14. DISTANCE IN MILES	AND DIRECTION FROM NEA	REST TOWN OR POS	T OFFIC	" ACITI TOC	MM.	12. COUNTY OR PARISH 18. STATE
15 miles V	west of Moab, U	OLEM Cools	16. N	O. OF ACRES IN LEASE	1 17. NO. C	Grand Co. UT
PROPERTY OF LEASE 1	Surf(LS)221 INE, FT. BHL(LS)800 I, unit line, if any	FNL Sec 11	ľ	37.50		560
18. DISTANCE FROM PROF TO NEAREST WELL, D	MAND INCIDIONS	VA I	19. P	KOPOSED DEPTH	20. ROTA	RY OR CABLE TOOLS
OR APPLIED FOR, ON TH	IS LEASE, PT.	4.	7	7850' TVD	R	otary
21. ELEVATIONS (Show who 6146 GR	ether DF, RT, GR, etc.)				•	May, 1998
23.		PROPOSED CASIN	IG AN	CEMENTING PROGRA	M	· · · · · · · · · · · · · · · · · · ·
SIZE OF ROLE	BIZE OF CABING .	WEIGHT PER PO	ют .	BETTING DEPTH	<u> </u>	QUANTITY OF CEMENT
		<b></b>	<del></del>	•		
		· ~.	<del>.</del>			
· · ·						
•	•					
SEE ATTACH	MENTS .				•	
· . This well	is a Horizontal	Test of the	.Can	e Creek Formatio	on.	•
				•••		
					•	
				•		
	•					•
		CONCIDE	'A 1'T'	41		
	<del>-</del>	CUNFIUE	NH	AL		
•	ing a second	e seg po	: •	• •		
IN ABOVE SPACE DESCRIBE sone. If proposal is to d preventer program, if any	irill or deepen directions.					active sone and proposed new productive and true vertical depths. Give blowout
24.	11/11/20					
SICHED JUMM	ZUJ UJ MARINI	MOV	≖ Mgr	: Envir., Safet	y & Re	16 December 1997
(This space for eder	al or State office use)	/,,				•
PERNIT NO.	3-019-310	64.	<del></del>	APPROVAL DATE	•	
APPROVED BY	Le relle		<b>.</b>	BRADLEY G	. Hill I	4/8/98
CONDITIONS OF APPROVA	IL IF ANY			RECLAMATION SP	ECIALIST	TIII

Federal Approval of this Action is Necessary



# Well Location Description

AVIARA Energy Corporation
Kane Springs Federal II-1
2220' FNL & 2060' FWL (top hole)
86.138 N & 2.488.168 E - Utah Central. NAD 27 (top hole)
6147' grd. el. from previous location
800' FNL & 800' FWL (bottom hole)
Grand County. UT

Gerald

# 25 November 1997

The above is true and correct to my knowledge

HUDDLESTON LAND SURVEYING - BOX KK - CORTEZ. CO - (970) 565 -3330

# WORKSHEET APPLICATION FOR PERMIT TO DRILL

API NO. ASSIGNED: 43-019-31364	
500) 	To stay
INSPECT LOCATION BY: / /	
TECH REVIEW Initials Date	
Engineering	
Geology	
Surface	
LOCATION AND SITING: YUnit Confided 8-52  R649-2-3. Unit: KANE SPRINGS  R649-3-2. General.  R649-3-3. Exception.  Drilling Unit.  Board Cause no:  Date:	2000
ROUAL	
	INSPECT LOCATION BY: / / TECH REVIEW Initials Date Engineering Geology Surface  LOCATION AND SITING: YUnit Controlled 8-52  WR649-2-3. Unit: WANE SPRINGS R649-3-2. General. R649-3-3. Exception. Drilling Unit. Board Cause no:

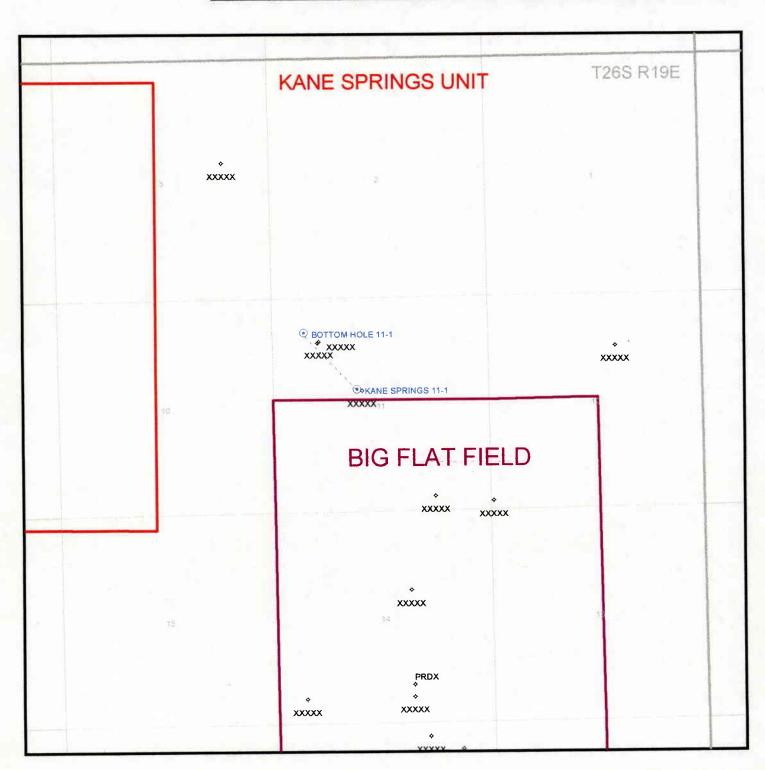


OPERATOR: AVIARA ENERGY CORP. (N5500)

FIELD: UNDESIGNATED (002)

SEC. TWP. RNG.: SEC. 11, T26S, R19E

COUNTY: GRAND UAC: R649-2-3 KANE SPRINGS UNIT



# WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 12/17/1997	API NO. ASSIGNED: 43-019-31364
WELL NAME: CANE CREEK FED 11-1  OPERATOR: AVIARA ENERGY ( N5500 )  CONTACT: DONNY WORTHINGTON	PHONE NUMBER: 713-871-3400
PROPOSED LOCATION:  SENW 11 260S 190E  SURFACE: 2220 FNL 2060 FWL  DESE BOTTOM: 1000 FSL 0660 FEL  GRAND  UNDESIGNATED ( 2 )  LEASE TYPE: 1 - Federal  LEASE NUMBER: UTU-65972  SURFACE OWNER: 1 - Federal  PROPOSED FORMATION: CNCR	INSPECT LOCATN BY: / /  Tech Review Initials Date  Engineering  Geology  Surface  LATITUDE: 38.55690  LONGITUDE: 109.79330
Plat  Bond: Fed[1] Ind[] Sta[] Fee[]  (No. 158798586 )  Potash (Y/N)  Oil Shale 190-5 (B) or 190-3 or 190-13  Water Permit  (No. MUNICIPAL )  N RDCC Review (Y/N)  (Date: )  NA Fee Surf Agreement (Y/N)	LOCATION AND SITING:  R649-2-3.  Unit CANE CREEK  R649-3-2. General Hove
STIPULATIONS: 1- FIDURA D ASSINGE O	



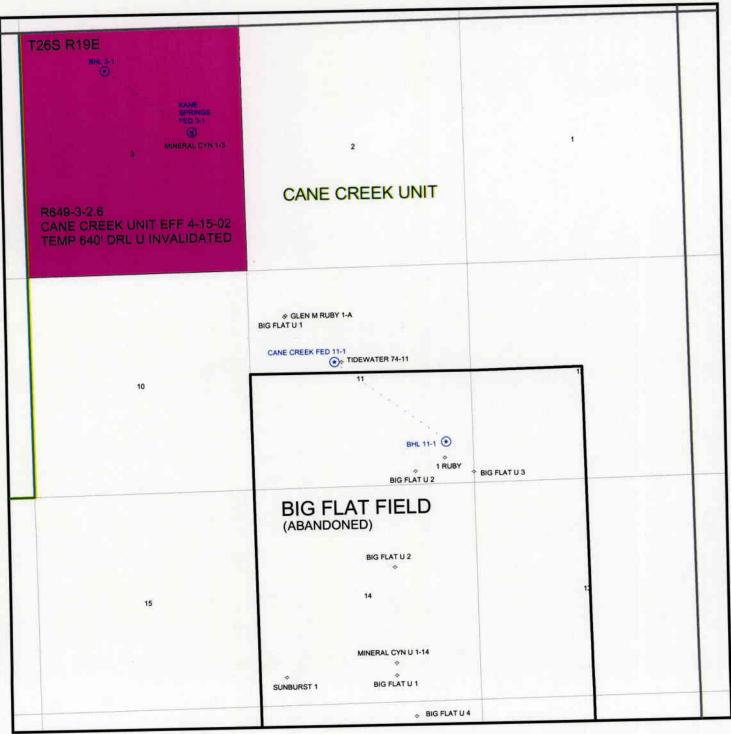
OPERATOR: AVIARA ENERGY CORP (N5500)

SEC. 11, T26S, R19E

FIELD: UNDESIGNATED (002)

COUNTY: GRAND UNIT: CANE SPRING

SPACING: R649-3-2/HORIZ



PREPARED BY: LCORDOVA DATE: 20-MAY-2002



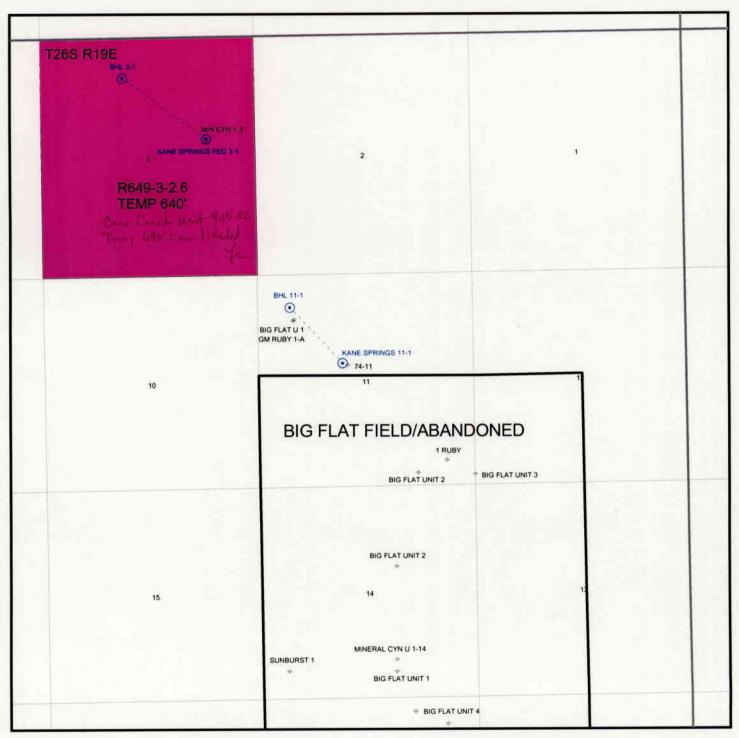
**OPERATOR: AVIARA ENERGY CORP (N5500)** 

SEC. 11, T26S, R19E

FIELD: (WILDCAT) Undesig.

COUNTY: GRAND SPACING: R649-3-2.6

HORIZ/DRL-TEMP 640'



Michael O. Leavitt Governor Ted Stewart Executive Director

1594 West North Temple, Suite 1210 PO Box 145801 Salt Lake City, Utah 84114-5801 801-538-5340 801-359-3940 (Fax) Lowell P. Braxton
Division Director
801-359-3940 (Fax)
801-538-7223 (TDD)

April 8, 1998

Aviara Energy Corporation P.O. Box 1350 Houston, Texas 77251-1350

Kane Springs 11-1 Well, 2220' FNL, 2060' FWL, SE NW, Re: Sec. 11, T. 26 S., R. 19 E., Grand County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. 40-6-1 et seq., Utah Administrative Code R649-3-1 et seq., and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-019-31364.

Sincerely,

🗘 John R. Baza

Associate Director

lwp

Enclosures

Grand County Assessor

Bureau of Land Management, Moab District Office

Operator:		Aviara Energy Corporation								
Well Name & 1	Number: _	Kane	Spring	ıs 11-	1.		<del></del>			
API Number:		43-0	19-3136	54			·····			
Lease:		UTU-	65972							
Location:	SE NW	Sec.	11	т.	26 S.	R.	19 E			

## Conditions of Approval

1. General

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for Permit to Drill.

2. Notification Requirements
Notify the Division within 24 hou

Notify the Division within 24 hours following spudding the well or commencing drilling operations. Contact Jim Thompson at (801)538-5336.

Notify the Division prior to commencing operations to plug and abandon the well. Contact Dan Jarvis at (801) 538-5338 or John R. Baza at (801)538-5334.

- 3. Reporting Requirements
  - All required reports, forms and submittals shall be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.
- 4. State approval of this well does not supercede the required federal approval which must be obtained prior to drilling.

Form 3160-3 (November 1983) (formerly 9-331C)

SUBMIT IN THEFLICATES

(Other instructions on reverse side)

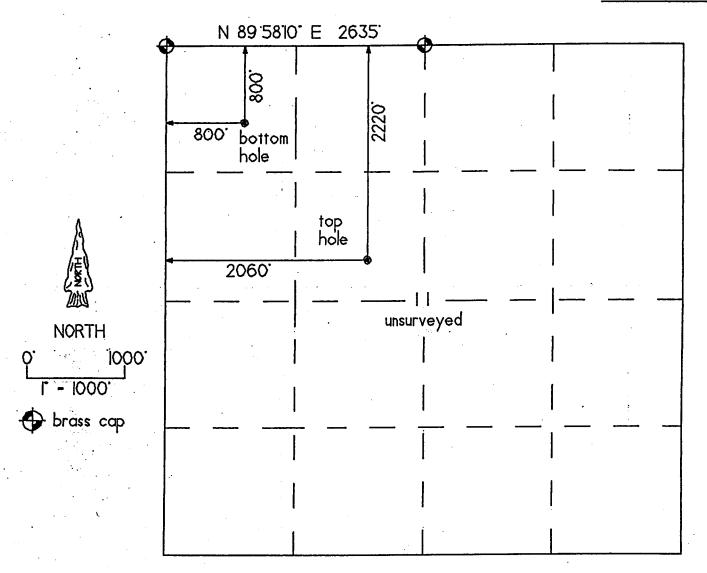
Form approved.
Budget Bureau No. 1004-0136
Expires August 31, 1985

UNITED	STATES
DEPARTMENT OF	F THE INTERIOR

	BUREAU O	F LAND MANA		<del>-</del>		5. LEASE DESIGNATION UTU-65972	AND SERIAL NO.
APPLICATIO	N FOR PERMIT	TO DRILL.	DEEPE	N. OR PLUG	BACK	6. IF INDIAN, ALLOTTE	B OR TRIBE NAME
la. Tipe of work					•		
b. TYPE OF WELL	RILL 🗆 X.	DEEPEN		PLUG B	ACK []	7. UNIT AGREEMENT I	
WELL IXX	GAS WELL OTREE			NE D MUL	TIPLE .	Kane Springs   6. FARM OR LEASE NA	Ma
2. NAME OF OPERATOR						Kane Springs	3
Aviara Energy 3. ADDRESS OF OPERATOR	Lorporation						
P. 0. Box 1	360. Houston, Report location clearly an	TX 77251-	1350			NO. I 10. FIELD AND POOL, 6	N WILDCAT
	•			ate requirements.*)		Wildcat	
At proposed prod. 20	& 2060' FWL Sec	. 11, 1265,	KIĐE			11. SEC., T., R., M., OR AND SURVEY OR AL	DLK. Lea
800' FNL	8 800 FWI Sec	. 11, T26S,	R19E			Sec. 11, T26	SS. R19E
14. DIRTANCE IN MILES	AND DIRECTION FROM NE	REST TOWN OR POS	T OFFICE	•		12. COUNTY OR PARISH	18. STATE
15. DISTANCE FROM PROP	west of Moab. U	4) 800' FNL Sec. 11	16. NO.	OF ACRES IN LEASE	1 17. NO. 6	Grand Co.	UT
LOCATION TO NEARES PROPERTY OR LEASE (Also to nearest dr)	LINE, FT. Sort. (1	J) 1994' FWslyELSec.) 4) 2219' FNL Sec.11	1 203	37.50	70 7	HIS WELL 560	
18. DISTANCE FROM PROT TO NEAREST WELL, I	COBED LOCATIONS	) 1779' FSL Sec.11	19. PRO	POSED DEPTH	20. ROTA	RY OR CABLE TOOLS	<del></del>
OR APPLIED FOR, ON TE	III LEASE, FT.	<b>N</b>	78	350' TVD	R	otary	<u> </u>
6146' GR	Day Mary Cong Cong	The Control of the Co				22. APPROX. DATE WO May, 1998	
23.		PROPOSED CASI	NG AND	CEMENTING PROG	RAM	1	<u>,                                      </u>
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER F	00T	SETTING DEPTH		QUANTITY OF CEMEN	· · · · · · · · · · · · · · · · · · ·
•		<u> </u>	<u></u>  -				
			1			• • •	*
	•		N. S.				
SEE ATTACH	MENTS		A.			\$	
				N. Committee			
•				No. of the last of			•
				· ·			
				The state of the s	•	.:	
		•			, a		
				N. Carlotte			
					<b>k</b>		
•			<b>.</b> .	•	The second second		
	<b>.</b>	e Set, ⊅e		ν	. 1	•	
IN ABOVE SPACE DESCRIBE RODE. If proposal is to depreventer program, if any	TIME OF GEEDER GILECTIONAL	roposal is to deepe ly, give pertinent	en or plus data on s	phack, give data on pubsurface locations a	resent produ	ctive sone and proposed and true vertical depths	new productive . Give blowout
Stepen James	Mysma	mala rin	. Mgr:	Envir. Safe	tv & Rec	Le & DATE 16 Dec	ember 1997
(This space for Feder	al or State office use)	<del>// </del>					
PERMIT NO.	. 0		.=	PROVAL DATE		The state of the s	
			^F	E EUVAL DATE			······································
APPROVED BY	T. TP ANY	TITL	¥			DATE	
		CONIC	IDEL	ITIAL			

CUNFIDENTIAL

\*See Instructions On Reverse Side



# Well Location Description

AVIARA Energy Corporation
Kane Springs Federal II-1
2220' FNL & 2060' FWL (top hole)
86.138 N & 2.488.168 E - Utah Central. NAD 27 (top hole)
6147' grd. el. from previous location
800' FNL & 800' FWL (bottom hole)
Grand County. UT

Gerald

# 25 November 1997

The above is true and correct to my knowledge

HUDDLESTON LAND SURVEYING - BOX KK - CORTEZ. CO - (970) 565 -3330

Aviara Energy Corporation Kane Springs Federal 11-1 Lease U-65972

Location:

Surface - SE/NW Section 11, T26S, R19E

Bottomhole - NW/NW Section 11, T26S, R19E

Grand County, Utah

## **CONDITIONS OF APPROVAL**

Approval of this application does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Be advised that Aviara Energy Corporation is considered to be the operator of the above well and is responsible under the terms and conditions of the lease for the operations conducted on the leased lands.

Bond coverage for this well is provided by CO 1274 (Principal - Aviara Energy Corporation) via surety consent as provided for in 43 CFR § 3104.2.

This office will hold the aforementioned operator and bond liable until the provisions of 43 CFR § 3106.7-2 continuing responsibility are met.

This permit will be valid for a period of one year from the date of approval. After permit termination, a new application must be filed for approval.

All lease operations will be conducted in full compliance with applicable regulations (43 CFR § 3100), Onshore Oil and Gas Orders, lease terms, notices to lessees, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions and the approved plan will be made available to field representatives to insure compliance.

## A. DRILLING PROGRAM

- 1. The requirements for air drilling, found in Onshore Oil and Gas Order No. 2, part III, E (Special Drilling Operations), shall be followed.
- 2. Prior to drilling out the production casing (7") shoe, the blow-out preverter stack shall be equipped with a remote kill line that runs unobstructed to the outer edge of the substructure. This is required by Onshore Oil and Gas Order No. 2 (part III.A.1.a.iv) when the anticipated pressure approaches the working pressure of the stack.
- 3. A cement bond log, or other appropriate tool for determining the top of cement, shall be run on the production casing (7").

#### TABLE 1

#### **NOTIFICATIONS**

Notify Rich McClure at 435-259-2127 prior to starting dirt work, and contact Jack Johnson at 435-259-2129 for all other required notifications which follow:

- 2 days prior to commencement of dirt work, construction and reclamation;
- 1 day prior to spudding;
- 50 feet prior to reaching each casing setting depth;

upon reaching kick-off point;

3 hours prior to testing BOPE

If the people at the above number cannot be reached, notify the Moab Office at 435-259-6111. If unsuccessful, contact one of the people listed below.

Well abandonment operations require 24 hour advance notice and prior approval. In the case of newly drilled dry holes, verbal approval can be obtained by calling the Moab Office at 435-259-6111. If approval is needed after work hours, you may contact the following:

Eric Jones, Petroleum Engineer	Office: Home:	(435) 259-2117 (435) 259-2214
Gary Torres Petroleum Engineer	Office:	(435) 587-1524

Home: (435) 587-1324

## B. SURFACE USE PLAN

- 1. No construction or drilling operations will be authorized between February 1 and July 15, unless additional raptor surveys are completed prior to initiating operations to identify and avoid raptor nesting sites within 1/2 mile of the proposed action. Any peregrine falcon nesting areas identified within the project area will be avoided by 1 mile. These limitations do not apply to maintenance and operation of existing wells, and these limitations do not apply to wells where drilling was initiated between July 16 and January 31.
- 2. A permit will be required from UDOT to construct the access from SR 313 to the proposed location for the Kane Springs 11-1 Well. Dale Stapley at the UDOT office in Price (435-636-1402) will be contacted for the permit. Unless UDOT provides alternate specifications, the access will be constructed as follows:
  - a. The access (roadway) will be constructed 30 feet wide,
  - b. There will be a 30 feet turning radius on both sides of the roadway where it joins SR 313,
  - c. The roadway will be graveled 50 feet from the edge of the paved highway during drilling operations (and paved 50 feet from edge of the paved highway during production),
  - d. A culvert of not less than 18 inch diameter will be installed in the highway borrow ditch being crossed, and
  - e. A sign will be installed on SR 313, north of the access being constructed for the 11-1 Well, to warn drivers of trucks turning ahead.
- 3. An approved archaeologist will monitor the construction of the location for the Kane Springs 11-1 Well. Construction will be confined within non-contributory portions of site 42Gr2239, as specified in the report for inventorying and testing the 11-1 Well. Any areas needed for parking equipment between the well site and SR 313 will be identified in advance by the archaeologist.
- 4. If a reserve pit is constructed for the Kane Springs 11-1 Well, these requirements will be followed during construction and reclamation of the reserve pit:
  - a. The reserve pit will be lined with bentonite unless specifications for an alternate method of lining are approved by the authorized officer.

Bentonite will be spread to a uniform depth over the reserve pit at an application rate of not less than 5 pounds per square foot. No bulk bentonite will be distributed when winds exceed 10 mph, and no sacked bentonite will be spread when winds exceed 20 mph unless approved in writing by the authorized officer.

After bentonite has been uniformly applied over the reserve pit, the bentonite will be thoroughly mixed with the underlying soil to a depth of 4 inches. Disking, rototilling, or a similar technique will be used to mix the bentonite with the soil. A minimum of two passes at right angles to each other will be made at the full depth of mixing.

If a synthetic liner is used, liner will be designed and installed in such a manner to assure it will not be punctured during installation or drilling operations.

- b. Upon completion of drilling operations, the reserve pit will be de-watered.

  Depending on the conditions at the time of disposal, the waste water will be (a) disposed of off-site at an approved disposal facility, (b) reinjected with the appropriate Underground Injection Control Permit from the State Division of Oil, Gas and Mining with concurrent approval by the Bureau of Land Management, Moab District Office, or (c) allowed to evaporate.
- c. The remaining reserve pit solids will be tested prior to stabilization. At least three samples will be taken from different areas of the pit. These samples will be analyzed by an independent laboratory for salt properties (electrical conductivity, sodium adsorption ratio and exchangeable sodium percentage), heavy metal content and oil and grease content. The results of these tests will be provided to the Moab District Office within 30 days of analysis.
- d. The reserve pit contents will then be mixed with fly ash, kiln dust, or bentonite to stabilize the salt adhered to the cuttings. Quantities of the mixing agent will be sufficient to assure the physical properties of the stabilized pit are similar to the physical properties of the native subsoils.
- e. The mixed contents will be sampled and tested for leachability of salts and heavy metals. There will be a minimum of 5 samples taken from the mixed pit remains. The samples will come from each corner section of the pit and from the middle. These samples will also be analyzed by an independent laboratory. The results of this testing will be provided to the Moab District Office within 30 days of analysis.
- f. If a synthetic liner is used, the remaining liner material will be folded over the edges of the mixed contents of the pit.
- g. The mixed pit contents will be covered by a minimum of one foot of native subsoils. If required, a thicker application may be allowed to bring the top of this cap nearly up to grade. The pit will then be allowed to set up for a minimum of 5 days prior to additional work on the pit involving the bentonite cap.
- h. A bentonite cap will be applied to the top of the pit. The bentonite will be a commercial grade and will be mixed with the native subsoils at the rate of 2-4 pounds per square foot of coverage. The cap will be at least 1 foot thick in the middle and grade to no less than 6 inches on the sides. The bentonite and subsoil mixture will be disked in to assure maximum effectiveness of the impervious cap. The cap will be crowned at the middle to allow proper drainage. The cap will extend at least 10 feet beyond the original pit boundaries to allow drainage away from the pit and prevent leaching of salts and heavy metals.

- i. The bentonite cap will then be covered with approximately 2 feet of subsoil and topsoil. The intent is to bring the topsoil and subsoil mixture including the cap slightly above grade with enough soil to allow for revegetation and compensate for settling.
- j. The Moab District Office will be kept informed of the timetables for all operations described above so that they can be witnessed.
- k. Alternate closure procedures or methods using similar techniques that would meet the BLM objectives for pit closure may be submitted for review. No alternate pit closure techniques will be initiated prior to BLM review and approval.
- 5. Prior to using water encountered during drilling operations for dust control, an analysis of the salt content, or total dissolved solids (TDS), will be required for BLM for review. BLM will consider the use of water with TDS levels higher than 10,000 ppm on a case by case basis.
- 6. At the end of drilling operations and prior to reclamation of the reserve pit, the fourth side of the pit will be fenced and the top of the pit will be covered with netting of one inch or less to prevent access by birds.
- 7. Prior to installing production facilities, the operator will schedule an on-site inspection of the well site with BLM to determine the locations of the production equipment. The purpose of the on-site inspection is to reduce potential visual impacts to known observation points. During the on-site inspection, the following types of mitigation will be discussed and implemented as needed:
  - a. Using equipment with neutral, non-reflective colors that blend with the surrounding rocks or trees; and using two neutral colors on an undulating or splotched (camo) pattern. (i.e. The lower portions of the equipment could be painted an earth-tone color and the upper portions could be painted to match the surrounding junipers.)
  - b. The use of low profile production tanks (seamless tanks, not bolted tanks), low profile pumping units, off-site production facilities, or pipelines. (Note: Based on EA UT-062-98-054, a low profile pumping unit will be installed at the Kane Springs 11-1 Well.)
  - c. The location and orientation of the equipment to help reduce the height of the facilities above the skyline and to help shield the moving components of the production equipment from view.
  - d. Lowering the flare pipe, raising the pit berm, or shielding the flare from known observation points along the highways or designated campgrounds.

- 8. Prior to spraying weeds on public lands, the operator will submit a Pesticide Use Proposal (PUP) to BLM for review and approval of the herbicide and methods to be used.
- 9. The following mixture of pure live seed (PLS) will be seeded between October and December, or at a time specified by the authorized officer:

Indian Ricegrass4 lbs/acreFourwing Saltbush3 lbs/acreWinterfat2 lbs/acreScarlet globemallow1 lbs/acreTotal10 lbs

If the seed is broadcast, the above rates will be doubled.

Form 3160-3 (November 1983) (formerly 9-331C)

# UNITED STATES DEPARTMENT OF THE INTERIOR

SUBMIT IN PLICATE\*
(Other instructions on reverse side)

Form approved. Budget Bureau No. 1004-0136 Expires August 31, 1985

		NI OF THE OF LAND MANA				5. LEASE DESIGNATION AND SERIAL NO. UTU-65972		
APPLICAT	TION FOR PERMIT	TO DRILL	DEFE	PEN OR PLI	IG RACK	6. IF INDIAN, ALLOTTES OR TRISE NAME		
1a. TYPE OF WORK								
b. Tipe or well	DRILL XX	DEEPEN		PLUG	BACK [			
OIL XX	OAB OTHER				MULTIPLE _	Kane Springs Federal Uni 6. FARM OR LEADE NAME		
2. NAME OF OPERATO						Kane Springs		
Aviara Ener	rgy Corporation					9. WELL NO.		
		TV 77051	1050			No. 1		
4. LOCATION OF WEL	( 1350, Houston, Legenty as	X //251- ad in accordance w	th any	State requirements.	•)	Wildcat		
At surface 1, 11 2220' FN	NL & 2060' <sup>678</sup> FWL Sec	. 11, T26S,	R19	·		11. SEC., T., R., M., OR BLK.		
At proposed prod						AND SURVEY OR AREA		
800' FN	VL & 800' FWL Sec	. 11, T26S,	R191			Sec. 11, T26S, R19E		
			T OFFIC		•	Grand Co. UT		
15. DISTANCE FROM I		Ls) 800' FNL Sec.11	16. N	O. OF ACRES IN LEA		O. OF ACRES ASSIGNED		
LOCATION TO NE. PROPERTY OR LE. (A)BO to DESCRI	ABE LINE, FT. Surf.	U) 1994' FWslyELSec. La) 2219' FNL Sec.11	1 20	37.50	. 7	560		
18. DISTANCE FROM	PROPOSED LOCATION* LL, DRILLING, COMPLETED,	U) 1779' FSL Sec.11-		ROPOSED DEPTH	20, R	OTARY OR CABLE TOOLS		
OR APPLIED FOR, O	N THIS LHASE, PT.		7	7850' TVD		Rotary		
6146' GR	whether DF, RT, GR, etc.)				•	22. APPROX. DATE WORK WILL START* May, 1998		
23.	•	PROPOSED CASI	NG AN	CEMENTING PR	ROGRAM			
SIZE OF HOLE	BIZE OF CABING	WEIGHT PER F	00T	BETTING DEPTI	н	QUANTITY OF CEMENT		
•								
•			•	·· ·	.			
SEE ATTA	ACHMENTS		•	•				
	•							
• .					150			
					· IIr	\\ DEC 17 1997    //		
					}	) \   BEC 17 1337   } \		
	:					V 05 011 010 0 110		
	<b>6.</b>				וטן	V. OF OIL, GAS & MINING		
			••		,	And the second s		
	the state of the state of	· 141, 72						
IN ABOVE BPACE DESC	RIBE PROPOSED PROGRAM: If	proposal is to deep	en or p	lug back, give data	on present pr	roductive sone and proposed new productive		
one. If proposal is preventer program, if	to drill or deepen directions any.	ully, give pertinent	data o	n subsurface location	ns and measu	ared and true vertical depths. Give blowout		
24.	10110	1-1	<del></del>		·····			
SIGNED JUNI	ny Uf Uf anh	MALONIT	. Mgr	: Envir., S	afety & I	Reg. DATE 16 December 1997		
(This space for )	ederal or State office use)	//						
PERMIT NO. 4	13-019-3136	Ý		APPROVAL DATE				
	·	•••		•				
CONDITIONS OF APP	ROVAL, IF ANY:	TIT				DATE		

# CONFIDENTIAL

\*See Instructions On Reverse Side

## Bureau of Land Management Moab District

# Application for Permit to Drill

# On-Site Inspection Checklist

Company	AVIARA	ENERGY COL	RP.	_Well No.	KANE SPRINGS FEDERAL #11-1
Location:	Sec. <u>11</u> , T.		19E	, Lease No.	UTU-65972
On-Site In	spection Date _	8/19/97 (Held p	rior to N	OS/APD to	screen VRM concerns)
CFR δ 310 operator is	00), Onshore Oi	l and Gas Orde le for the action	rs, the a	pproved pla	in pliance is made with applicable laws, regulations (43 in of operations and the conditions of approval. The tors. A copy of these conditions will be furnished to
A. DRILL	ING PROGRAN	<u>1</u>			
	face Formation		ormation		DENET (AVD_45)
	DRMATION TO			SUBSEA	DEPTH (RKB=25)
	avajo Sandstone	) <u> </u>		6148	0
	hinle			5452	695
	utler			4652	1495 3740
	ermosa			2407	4255
	aradox Salt			1892	7575
_ <u>C</u>	ane Creek			-1428	1313
E	xpected Oil Zon	es: Cane Creek			neral Bearing Zones are Expected to be Encountered:  D: Depth (RKB=25'): 7695'
	xpected Gas Zo  xpected Water 2		Sandsto	ne - Surface	e: sub-sea: 6147' TVD Depth (RKB=25'): 0'
E	xpected Minera	Zones:			•
a: ta	nd will be cased	d and cemented sed with the res	. When sults being	possible, w	encountered during drilling will be recorded by depth ater flow rates will be measured and samples will be d to BLM. All oil and gas shows will be tested to
p	rocedures:				f the BOP and choke manifold, and describe testing
<u>s</u>	URFACE (0-75	O') & UPPER II	TERM	EDIATE (7:	50' - 4,300') INTERVAL:
_	A rotating head	and blooie line	will be r	igged up on	the conductor and surface pipe. One (1) annular bag-
<u>t</u> y	pe and prevente	er will be utilize	d while	drilling the	surface hole to 750' and intermediate hole to 4,300' in

the air drilling interval of the hole (See Exhibit C-1).

**LOWER INTERMEDIATE INTERVAL 4,300'-7,710'** 

One (1) annular bag-type and (3) ram-type preventers will be utilized while drilling below the intermediate pipe. Ram preventers are to be tested to a minimum of seventy percent (70%) of working pressure or a minimum of seventy percent (70%) of burst rating of intermediate pipe. Annular preventer is to be tested to a minimum of fifty percent (50%) of working pressure. (See Exhibit C-2).

Choke Manifold will meet or exceed the requirements of the typical 5M manifold as in Onshore Order #2. Two remote operated hydraulic chokes installed prior to drilling into the Cane Creek. One panel will be located on the rig floor and the other panel on the ground (See Exhibit C-2).

#### HORIZONTAL INTERVAL 7,710' - 9,329'

While drilling horizontally through the Cane Creek formation a high pressure rotating head diverter will be installed on top of the annular preventer. The static working pressure will equal or exceed 2,500 psi and the rotating working pressure will equal or exceed 1,500 psi. The rotating head will be tested to 3,000 psi with a test cap. (See Exhibit C-3).

A large atmospheric gas buster rated at a minimum of 50 mmscf/day with a minimum of 8" x 150' flare line routed to flare pit. The flare line is to be equipped with an electric igniter.

This equipment will be utilized to safely control well pressures and produced fluids while drilling into the potentially fractured Cane Creek formation.

BOP systems will be consistent with API RP 53 and Onshore Oil and Gas Order No. 2. Pressure tests of the surface casing and all BOP equipment potentially subject to pressure will be conducted before drilling the surface casing shoe. Blowout preventer controls will be installed prior to drilling the surface casing shoe and will remain in use until the well is completed or abandoned. Ram preventers shall be inspected and operated each trip (no more than once a day is necessary), and annular preventers shall be inspected and operated weekly to ensure good mechanical working order. These inspections shall be recorded in the drilling log and in the daily drilling report.

4. <u>Casing Program and Auxiliary Equipment</u> -include casing size, weight, grade, thread and coupling, setting depth and condition (new or acceptably reconditioned):

### **SURFACE PIPE:**

0-750' INTERVAL; 13-3/8" SIZE; 54.5 WT; K-55 GR; STC CONN; 2730/10.2 BURST/SF; 1130/3.4 COLLAPSE/SF; 547/13 TENSION/SF. Set ± 50' below top of Chinle Red Beds. Tension safety factor calculated using air weight. Pressure test to 70% of casing burst or 1900 psi before drilling out of shoe.

#### INTERMEDIATE PIPE:

0-4300' INTERVAL; 9-5/8" SIZE; 40 WT; K-55 GR; STC CONN; 3950/1.4 BURST/SF; 2570/1.4 COLLAPSE/SF; 486,000/2.8 TENSION/SF. Set ± 30' below top of Paradox Salt. Tension safety factor calculated using air. Collapse design based on 8.5 ppg emw gradient with no backup fluid (casing evacuated). Collapse design neglects salt creep load in Paradox Salt. Burst design based on maximum surface pressure calculated by subtracting an oil gradient of 0.355 psi/ft from a fracture gradient of 1.0 psi/ft. A burst backup fluid of 8.5 ppg was used. Pressure test to 81% of casing burst or 3200 psi before drilling out of shoe.

#### PRODUCTION PIPE:

INTERVAL	SIZE	WT	GR	CONN	BURST/SF	DERATED COLLAPSE/SF	TENSION/SF
0-4100'	7	26	N-80 .	LTC	7240-1.7	5410/1.84	519,000/2.35
4100-7710'	7	32	HCN-80	LTC	9060/2.0	10400/1.3	738,000/2.4

Set ± 15' TVD below top of Cane Creek. Tension safety factor calculated using air. Bending stresses considered using 20°/100' dog leg severity. Collapse design based on 10 ppg emw gradient from 0 - 4100' with casing evacuated. From 4100' to 7615' TVD/7710' MD, collapse design based on 1.04 psi/ft with casing evacuated. Collapse resistance is de-rated for bi-axial stresses. Burst design based on maximum surface pressure equal to a pore pressure of 18.0 ppg emw less an oil gradient of 0.355 psi/ft. The packer fluid density and burst backup fluid density are assumed to be equal. Pressure test to 5000 psi or 55% of casing burst before drilling out of shoe.

#### PRODUCTION LINER:

7610'-9326' INTERVAL; 4-1/2" SIZE; 13.5 WT; N-80 GR; BTC CONN; 9020/NA BURST/SF; 10380/1.9 COLLAPSE/SF; 359,000/3.6 TENSION/SF. Release ± 100' MD above 7" casing shoe. Every third joint will be pre-drilled with 3/4" diameter holes every two feet at 90° phasing. The holes will be plugged with drillable aluminum plugs. Tension design based on 100,000 LB of over pull. Collapse design based on collapse gradient of 1.0 psi/ft.

## **AUXILIARY EQUIPMENT:**

- A. A kelly cock will be kept in the string at all times.
- B. A stabbing valve will be kept on the derrick floor at all times.
- C. Drill pipe floats will be used while air drilling.
- D. Tandem floats will be placed above MWD and downhole motors in the drill string when drilling in the Cane Creek formation.
- E. A large atmospheric gas buster rated at a minimum of 50 mmscf/day with a minimum of 8" x 150' flare line routed to flare pit. The flare line is to be equipped with an electric igniter.
- F. Two remote operated hydraulic chokes installed prior to drilling into the Cane Creek. One panel will be located on the rig floor and the other panel on the ground.
- G. Visulogger rigged up after drilling out of 9-5/8" casing.
- H. Top Drive to be rigged up prior to drilling out of 7" casing.
- 5. <u>Cement</u> -include the cement type, density, yield, additives and amount used in setting each casing string. Also include the anticipated cement fill-up. If stage cementing, describe techniques:

SURFACE PIPE: Lead w/ 390 sks CL G (35:65) POZ + 6% gel + 3#/sk cello flakes, 12.6 ppg, 1.91 yield. Tail w/ 260 sks CL G + 2% CaCl<sub>2</sub>, 15.8 ppg, 1.16 yield. TOC-surface.

INTERMEDIATE PIPE: Lead w/ 200 sks CL G (35:65) POZ + 6% gel + 3#/sk cello flakes, 12.6 ppg, 1.91 yield. Tail w/ 240 sks CL G neat, 15.8 ppg, 1.15 yield. TOC- 2630' w/ 35% excess.

PRODUCTION PIPE: Lead w/ 325 sks CL G (35:65) POZ + 6% gel + retarder + .25% cello flakes, 12.6 ppg, 1.89 yield. Tail w/ 145 sks CL G + 10% gypsum + 3% salt + fluid loss additive + retarder. TOC-3800' w/ 35% excess.

Surface casing shall be cemented back to surface. Centralizers shall be run, at a minimum, on the bottom three joints of each casing string.

6. Mud Program and Circulating Medium -include mud components and weights. When air drilling, also include: length and location of blooie line; description of the auto igniter; description of the de-duster equipment; and amounts, types and characteristics of stand-by mud:

DEPTH (MD)	WEIGHT	PV	YP	API WL	ТҮРЕ
0 - 750'					Air/Mist/Water
750' - 4300'					Air/Mist/Water
4300' - 7710'	12 - 18	35 - 60	20 - 24	<10	Oil Based Mud
7710' - 9329'	15 - 18	45 - 60	20 - 24	<10	Oil Based Mud

Blooie line will be to SW side of location and 100' from well. Igniter will be solar/battery powered.

Due to potential for contamination of usable quality water aquifers, chromates are banned from Federal leases.

Sufficient mud materials will be stored on location to maintain well control and combat lost circulation problems that might reasonably be expected.

### 7. Coring, Logging and Testing Program:

- A. Drill Stem Tests none planned.
- B. Well Logging and Intervals: Induction/Sonic/CNL/Den/GR 4300' 7615' TVD MWD/GR will be attempted from kick off point at 7200' TVD/MT to TD at 7615' TVD/9329' MD
- C. Cores: A 30' oriented core will be attempted in the Cane Creek formation at the first sign of fractures.
- D. Directional Surveys: This well as proposed will be drilled vertically to 7200' and then drilled as a medium radius well at an azimuth of 318 DEG for a total displacement of 1898'. Inclination surveys will be taken at 500' and at 1000' maximum intervals until KOP. At KOP a multi-shot will be taken. During the angle build portion, surveys will be taken at 90' maximum intervals. During the horizontal portion of the hole, surveys will be taken at 200' maximum intervals.
- E. Samples: One sample will be taken at 10' intervals from 4000' to TVD.
- F. Mud Logger: There will be a mud logger on location at 4000' (300' above intermediate pipe depth) to TVD.
- G. Completion Procedure: To be submitted on form 5 under "Approval of Subsequent Operations".
- H. Where the well is completed as a dry hole or a producer, "Well Completion and Recompletion Report and Log" (Form 3160-4) will be submitted not later than 30 days after completion of the well or completion of operations being performed, in accordance with 43 CFR 3164. Two copies of all logs, core descriptions, core analyses, well test data, geologic summaries, sample description, and all other surveys or data obtained and compiled during the drilling, workover, and/or completions operations will be filed with form 3160-4.

Initial opening of drill stem test tools will be restricted to daylight hours.

- 8. Abnormal Conditions, Bottom Hole Pressures and Potential Hazards include anticipated bottomhole pressure and/or pressure gradient. Also list anticipated lost circulation zones, abnormal temperature zones and possible hydrogen sulfide bearing zones: Abnormal pressure is anticipated in the Cane Creek formation. The proposed casing program and pressure control equipment has been designed based on the anticipated abnormal pressures of the Cane Creek formation. Flow drilling techniques will be used to safely control surface pressures and well fluid influxes. Pore pressures up to 18.0 ppg are expected. Hydrogen Sulfide is not anticipated.
- 9. Any Other Aspects of this Proposal that should be Addressed:
  - A. Construction of Location is scheduled to start immediately after approval of APD.
  - B. No location will be constructed or moved, no well be plugged and no drilling or workover equipment will be removed from the well to be placed in a suspended status without prior approval of the AO.
  - C. The spud date will be reported orally to the AO within 48 hours after spudding, or on the next business workday if the spud occurs on a weekend.
  - D. Spills, blowouts, fires, leaks, accidents or any other unusual occurrences shall be promptly reported in accordance with the requirements of NTL-3A or its revisions.
  - E. If a replacement rig is contemplated for completion operations, a "Sundry Notice" to that effect

will be filed, for prior approval of the AO, and all conditions of this approved plan are applicable during all operations conducted with the replacement rig.

- F. Should the well be successfully completed for production, the AO will be notified when the well is placed in a production status. Notification will be made no later than five days following the date on which the well is placed on production.
- G. Venting/flaring of gas during initial well evaluation tests will not exceed a period of thirty days or the production of 50 MMCF/day of gas, whichever occurs first. An application will be filed with the District Engineer and approval received, for any venting or flaring beyond the initial 30 day authorized test period.
- H. Well abandonment operations will commence only after prior approval has been received from the AO. In the case of newly drilled dry holes or failures, and in emergency situations, oral approval will be obtained from the AO. A "Subsequent Report of Abandonment" will be filed with the AO within 30 days following completion of the well abandonment operations.
- I. There will be no deviation from the proposed drilling and/or workover program without prior approval of the AO. Safe drilling and operating practices will be observed.
- J. This well whether drilling, producing, suspended, or abandoned will be identified in accordance with 43 CFR 3162.3-2.

#### B. THIRTEEN POINT SURFACE USE PLAN

e.

Maximum travel surface width: 35 feet

The dirt contractor will be provided with an approved copy of the surface use plan of operations before initiating construction.

ı.	Existing	Roads:					
	a.	Proposed route to location (submit a map depicting access and well location). See Map "A" and "B".					
	b.	Location of proposed well in relation to town or other reference point:  From Moab, 11 miles N on Hwy. 191, left on SR 313 for 13 miles, to location on right side of road.					
	c.	Contact the County Road Department for use of county roads.					
	d.	Plans for improvement and/or maintenance of existing roads: No improvement needed					
	e.	Other:					
2.	Planned	Access Roads:					
	a.	Location (centerline): Access road flagged with surveyor's ribbon between location and SR 313.					
	b.	Length of new access to be constructed: 200 ft.					
	c.	Length of existing roads to be upgraded: N/A					
	d	Maximum total disturbed width: 45 feet					

f.	Maximum grades: N/A		
g.	Turnouts: N/A		
h.	Surface materials: Native soils during drilling. During production, as per BLM's Surface Operating Standards for Oil and Gas Exploration and Development		
i.	Drainage (crowning, ditching, culverts, etc.): Flat bladed for drilling operations. Crowned ditched for production as per BLM's Surface Operating Standards for Oil and Gas Exploration at Development. Culverts will be installed at all drainages where needed.		
j.	Cattle guards: None		
k.	Length of new and/or existing roads which lie outside the lease or unit boundary for which a BLM right-of-way is required: None		
1.	Other:		
	ce disturbance and vehicular travel will be limited to the approved location and access road. Any onal area needed must be approved by the Area Manager in advance.		
includ proces	any time the facilities located on public lands authorized by the terms of the lease are no longer led in the lease (due to a contraction in the unit or other lease or unit boundary change) the BLM will ss a change in authorization to the appropriate statute. The authorization will be subject to priate rental, or other financial obligations determined by the authorized officer.		
Standa standa	well is productive, the access road will be rehabilitated or brought to Resource (Class III) Road ards within 60 days of dismantling the rig. If upgraded, the access road must be maintained at these ards until the well is properly abandoned. If this time frame cannot be met, the Area Manager will be ed so that temporary drainage control can be installed along the access road.		
drillin Ass.'s	ion of Existing Wells -on a map, show the location of all water, injection, disposal, producing and g wells within a one mile radius of the proposed well, and describe the status of each Tidewater & #74-11 Tidewater, King Oil Co.'s #1 Ruby, Glen Ruby's #1 & #1A Big Flat Unit and Pure Oil's #2 were drilled and abandoned. See map "B" for location of wells.		
Locat	ion of Production Facilities:		
a.	On-site facilities: If well is productive, new on-well pad facilities and lines will be submitted as "as built" under the following guide lines. Facilities will be placed in cut as much as possible. All internal combustion engines associated w/ production facilities will be equipped w/ noise reducing mufflers. Fire prevention and suppression requirements for operations on Federal lands will be followed as per BLM guidelines. If productive, anticipate treater, flare pit, separator, 2-3 production tanks, 1 water tank, and a pumping unit 2-3 years after initial production.		
<b>b.</b>	Off-site facilities: None		
c.	Pipelines: No permanent pipelines are anticipated between this well and existing facilities at		

3.

4.

other Kane Springs wells.

All permanent (in place for six months or longer) structures constructed or installed (including oil well pump jacks) will be painted a flat, non-reflective color to match the standard environmental colors, as

determined by the Rocky Mountain Five-State Interagency Committee. All facilities will be painted within six months of installation. Facilities required by comply with the Occupational Safety and Health Act (OSHA) may be excluded. Colors will be as follows: Match surrounding rocks, soils, vegetation.

All site security guidelines identified in 43 CFR δ 3162.7-5 and Onshore Oil and Gas Order No. 3 shall be followed.

If a gas meter run is constructed, it will be located on lease within 500 feet of the wellhead. The gas flowline will be buried from the separation equipment to the meter and will be buried downstream of the meter until it leaves the pad. Meter runs will be housed and/or fenced. The gas meter shall be calibrated prior to first sales and shall be calibrated quarterly thereafter. All gas production and measurement shall comply with the provisions of 43 CFR  $\delta$  3162.7-3, Onshore Oil and Gas Order No. 5, and American Gas Association (AGA) Report No. 3.

If a tank battery is constructed on this lease, it will be surrounded by a berm of sufficient capacity to contain the storage capacity of the largest tank and 1 day's production. All loading lines and valves will be placed inside the berm surrounding the tank battery. All oil production and measurement shall conform to the provisions of 43 CFR  $\delta$  3162.7-3 and Onshore Oil and Gas Order No. 4.

Production facilities on location may include a lined or unlined produced water pit as specified in Onshore Order No. 7. If water is produced from the well, an Onshore Order No. 7 application must be submitted.

## 5. Location and Type of Water Supply:

All water needed for drilling purposes will be obtained from (describe location and/or show on a map): City of Moab

A temporary water use permit for this operation will be obtained from the Utah State Engineer in Price, Utah at (801) 637-1303.

Water obtained on private land, or land administered by another agency, will require approval from the owner or agency for use of the land.

## 6. Source of Construction Material:

Pad construction material will be obtained from (if the source is Federally owned, show location on a map): Native on site materials for well pad.

The use of materials under BLM jurisdiction will conform to 43CFR  $\delta$  3610.2-3.

#### 7. Methods of Handling Waste Disposal:

Describe the methods and locations proposed for safe containment and disposal of waste material, e.g. cuttings, produced water, garbage, sewage, chemicals, etc.

A. Drill cuttings will be deposited in either the blooie pit or a closed loop system on location.

Cuttings from air drilling will be deposited into the blooie pit. After switching to the mud system, cuttings will be removed from location and taken to an open reserve pit at another Kane Springs

Unit well (possibly the Kane Springs Federal #7-1 if reserve pit can be easily dug).

B. Drilling fluids will be confined to closed loop system and blooie pit if necessary. At rig release, mud will be removed from location for future use.

- C. While testing the well, all produced water will be contained in a storage tank or temporary produced water pit. If well is a producer, a saltwater storage tank will be installed with the tank battery.
- D. Sewage will be either treated on-site using an approved treatment unit or disposed of according to county and state requirements in a portable chemical toilet or in a hole at least 15" deep excavated in the cut portion of the well pad.
- E. Portable dumpsters or "trash trailers" will be used for all trash. All trash will be hauled offsite.
- F. If a fresh water flow is encountered during the air drilling operations, the water may be used for dust control on the location and access roads, provided the following conditions are met:
  - 1. The BLM will be notified of our intent to use the fresh water for this purpose,
  - 2. The chlorides content of the water will be 6060 ppm or less, which is essentially equivalent to or less than 10,000 mg/1 total dissolved solids. Water with higher chlorides content may be used for dust control with specific prior approval of the BLM.
  - 3. The water will be tested by an independent lab or mud engineer and the results of the analysis will be provided to the BLM.
- G. An apron consisting of 12 mil plastic liner material will be placed under the mud tanks. If needed, the blooie pit will be lined with a 12 mil plastic liner or a bentonite/soil mixture of 5# bentonite per square foot, mixed to a depth of 8" as specified by the BLM.
- H. After first production, produced waste water will be confined to a lined pit or storage tank for a period not to exceed 90 days. During the 90 day period, in accordance with NTL-2B, an application for approval of permanent disposal method and location, along with required water analysis, shall be submitted for the authorized officer's approval.

The reserve pit will be located: No reserve pit is planned for this well due to the limited area available for a location.

The reserve pit shall be located in cut material, with at least 50% of the pit volume being below original ground level. Three sides of the reserve pit will be fenced before drilling starts. The fourth side will be fenced as soon as drilling is completed, and shall remain until the pit is dry. As soon as the reserve pit has dried, all areas not needed for production will be rehabilitated.

- 8. Ancillary Facilities: Two areas adjacent to the location will be needed for trailers or misc. equipment while drilling this well. One to the South of the location that would be about 50' x 100', and one to the East of the location that would be about 150' x 200'. Both of these areas have been previously disturbed by past drilling. These areas will be flagged and approved by BLM prior to any construction of the location.
- 9. Well Site Layout -depict the pit, rig, cut and fill, topsoil, etc. on a plat with a scale of at least 1"=50'.

10.

All wells, whether drilling, producing, suspended, or abandoned, will be identified in accordance with 43 CFR  $\delta$  3162.6.

Access to the well pad will be from: See diagram	
The blooie line will be located: NE side of well site.	
	, at least 100 feet from the well head.
To minimize the amount of fugitive dust and spray es deflection method will be employed: directed into len  Plans for Restoration of the Surface:	

The top 0 inches of topsoil material will be removed from the location and stockpiled separately on:

Since this location is on exposed flat-rock, there is no appreciable amount of topsoil to remove.

Topsoil along the access road will be reserved in place adjacent to the road.

Immediately upon completion of drilling, all equipment that is not necessary for production shall be removed.

The reserve pit and that portion of the location not needed for production will be reclaimed.

Before any dirt work to restore the location takes place, the reserve pit must be completely dry.

All road surfacing will be removed prior to the rehabilitation of roads.

Reclaimed roads will have the berms and cuts reduced and will be closed to vehicle use.

All disturbed areas will be re-contoured to replicate the natural slope.

The stockpiled topsoil will be evenly distributed over the disturbed area.

Prior to reseeding, all disturbed areas, including the access roads, will be scarified and left with a rough surface.

Seed will be broadcast or drilled between October 1 and December 31, or at a time specified by the BLM. If broadcast, a harrow or some other implement will be dragged over the seeded area to assure seed coverage.

The following seed mixture will be used: (PLS) drill seeding rate

Indian rice grass	4#/Ac		 
Fourwing saltbush	4#/Ac		 
Galleta	4#/Ac		
Sand dropseed	1#/Ac		 
Increase 50% if broadc	ast		

The abandonment marker will be one of the following, as specified by BLM:

- 1) at least four feet above ground level,
- 2) at restored ground level, or
- 3) below ground level.

In any case the marker shall be inscribed with the following: operator name, lease number, well name and surveyed description (township, range, section and either quarter-quarter or footages).

			~ *
Δ	ddiftonal	requirements:	None
_	uuiuviiai	i councincins.	ITOHC

#### 11. Surface and Mineral Ownership: Fed/Fed

#### 12. Other Information:

a. Archeological Concerns: Four Corners Archeology will complete Class III inventory

The operator is responsible for informing all persons in the area who are associated with this project that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during construction, the operator is to immediately stop work that might further disturb such materials, and contact the authorized officer (AO). Within five (5) working days, the AO will inform the operator as to:

- whether the materials \_\_ear eligible for the National Register of Histo\_\_/laces;
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary); and
- a time frame for the AO to complete an expedited review under 36 CFR  $\delta$  800.11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation costs. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

b. Threatened and Endangered Species Concerns	None identified by BLM
---	------------------------

- c. Wildlife Seasonal Restrictions (yes/no): None identified by BLM. No lease stipulations.
- d. Off Location Geophysical Testing: None
- e. Drainage crossings that require additional State or Federal approval: None
- f. Other: Well site orientation and VRM concerns discussed with BLM on 11/5/97.

#### 13. Lessee's or Operator's Representative and Certification

#### Representative:

Name:

Donnie Worthington

Title:

Environmental/Safety/Regulatory Manager

Address:

P.O. Box 1350

Houston, TX 77251-1350

Phone No.

(713) 871-3445

### Certification:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements make in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Aviara Energy Corporation and its contractors and subcontractors in conformity with this APD package and the terms and conditions under which it is approved. I also certify responsibility for the operations conducted on that portion of the leased lands associated with this application, with bond coverage being provided under BLM bond no. 158798586. This statement is subject to the provisions of 18 U.S.C. δ 1001 for the filing of a false statement.

Signature Swerker

Staff Petroleum Engineer

Title

12-16-1997

Date

## C. REQUIRED APPROVALS, REPORTS AND NOTIFICATIONS

<u>Building Location</u>- Contact the Resource Area, Natural Resource Protection Specialist at least 48 hours prior to commencing construction of location.

Spud- The spud date will be reported to the Resource Area Office 24 hours prior to spudding. Written notification in the form of a Sundry Notice (Form 3160-5) will be submitted to the District Office within 24 hours after spudding, regardless of whether spud was made with a dry hole digger or big rig.

<u>Daily Drilling Reports</u>- Daily drilling reports shall detail the progress and status of the well and shall be submitted to the District Office on a weekly basis.

Monthly Reports of Operations- In accordance with Onshore Oil and Gas Order No. 1, this well shall be reported on Minerals Management Service (MMS) Form 3160, "Monthly Report of Operations," starting the month in which operations commence and continuing each month until the well is physically plugged and abandoned. This report will be filed directly with MMS.

Sundry Notices- There will be no deviation from the proposed drilling and/or workover program without prior approval. "Sundry Notices and Reports on Wells" (Form 3160-5) will be filed for approval for all changes of plans and other operations in accordance with 43 CFR  $\delta$  3162.3-2. Safe drilling and operating practices must be observed.

<u>Drilling Suspensions</u>- Operations authorized by this permit shall not be suspended for more than 30 days without prior approval of the Authorized Officer. All conditions of this approval shall be applicable during any operations conducted with a replacement rig.

<u>Undesirable Events-</u> Spills, blowouts, fires, leaks, accidents, or any other unusual occurrences shall be immediately reported to the Resource Area in accordance with requirements of NTL-3A.

<u>Cultural Resources</u>- If cultural resources are discovered during construction, work that might disturb the resources is to stop, and the Area Manager is to be notified.

<u>First Production</u>- Should the well be successfully completed for production, the District Office will be notified when the well is placed in producing status. Such notification may be made by phone, but must be followed by a sundry notice or letter not later than five (5) business days following the date on which the well is placed into production.

A first production conference will be scheduled as soon as the productivity of the well is apparent. This conference should be coordinated through the Resource Area Office. The Resource Area Office shall be notified prior to the first sale.

Well Completion Report- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (Form 3160-4) will be submitted to the District Office not later than thirty (30) days after completion of the well or after completion of operations being performed, in accordance with 43 CFR  $\delta$  3162.4-1. Two copies of all logs, core descriptions, core analyses, well test data, geologic summaries, sample description, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed with Form 3160-4. When requested, samples (cuttings and/or samples) will be submitted to the District Office.

Venting/Flaring of Gas- Gas produced from this well may not be vented/flared beyond an initial, authorized test period of 30 days or 50 MMcf, whichever first occurs, without the prior, written approval of the District Office. Should gas be vented or flared without approval beyond the authorized test period, the well may be ordered shut-in until the gas can be captured or approval to continue the venting/flaring as uneconomical is granted. In such case, compensation to the lessor shall be required for that portion of the gas that is vented/flared without approval and which is determined to have been avoidably lost.

<u>Produced Water-</u> Produced waste water may be confined to an unlined pit for a period not to exceed 90 days after initial production. During the 90 day period, an application for approval of a permanent disposal method and location, along a water analysis, if required, will be submitted to the District Office for approval pursuant Onshore Oil and Gas Order No. 7.

Off-Lease Measurement, Storage, Commingling- Prior approval must be obtained from the District Office for off-lease measurement, off-lease storage and/or commingling (either down-hole or at the surface).

<u>Plugging and Abandonment-</u> If the well is completed as a dry hole, plugging instructions must be obtained from the District Office prior to initiating plugging operations.

A "Subsequent Report of Abandonment" (Form 3160-5) will be filed with the District Office, within thirty (30) days following plugging and abandonment of the well. This report will indicate where plugs were placed and the current status of surface restoration. Upon completion of approved plugging, a regulation marker will be erected in accordance with 43 CFR  $\delta$  3162.6. Final abandonment will not be approved until the surface reclamation work required by the approved APD or approved abandonment notice has been completed to the satisfaction of the Area Manager or his representative, or the appropriate surface managing agency.

## TABLE 1

## **NOTIFICATIONS**

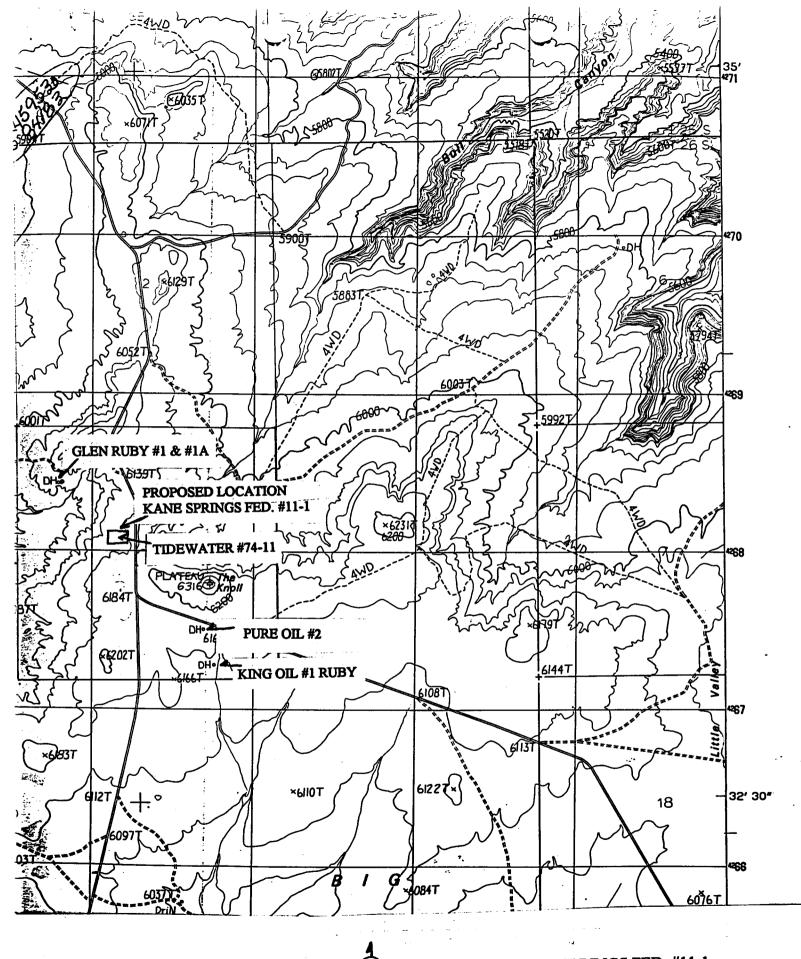
Notify	of the	_ Resource Area, at	for the following:
2 days prid	or to commencem	ent of dirt work, construc	tion or reclamation;
1 day prior	r to spudding;		
50 feet pri	or to reaching sur	face and intermediate cas	ing depths;
3 hours pr	ior to testing BOP	PE;	
12 hours p	rior to reaching k	ickoff point depth (if app	licable).
		amber cannot be reached, y one of the people listed	notify the Moab District Office at (801) 259 below.
newly dril Branch of	led dry holes, ver	bal approval can be obtain	ce notice and prior approval. In the case of ned by calling the Moab District Office, oval is needed after work hours, you may
Eric Jones	, Petroleum Engir	neer Office: (801) 2 Home: (801) 2	



TOPOGRAPHIC MAP "A"



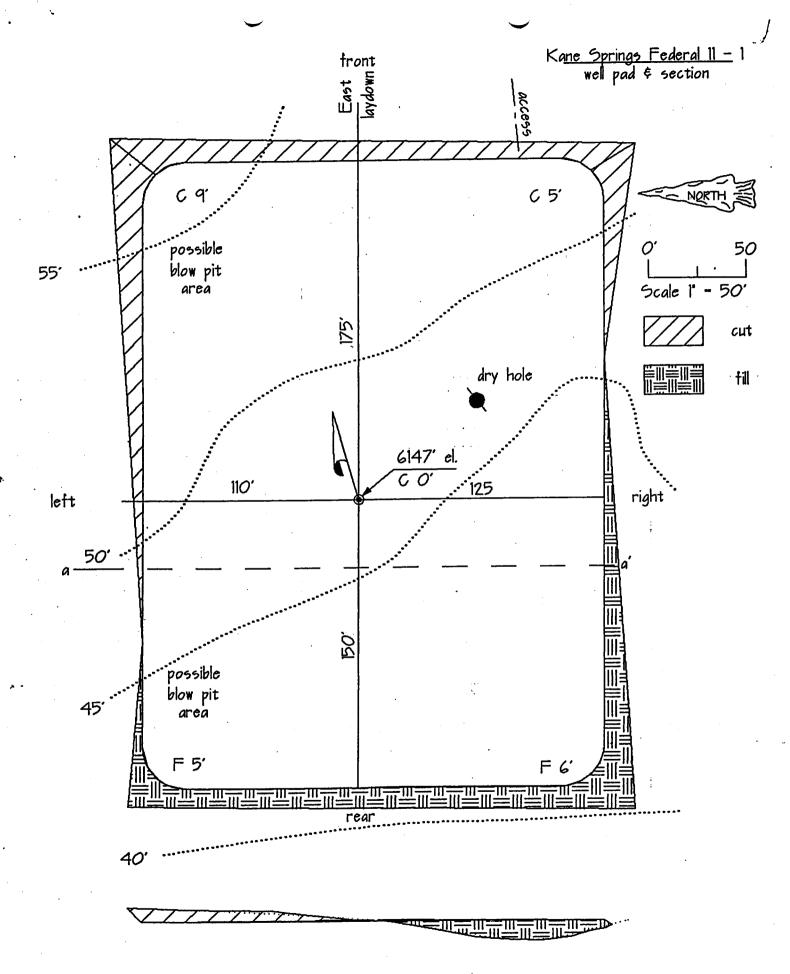
KANE SPRINGS FED. #11-1 SECTION 11, T26S, R19E S.L.B.&M.



TOPOGRAPHIC MAP "B"



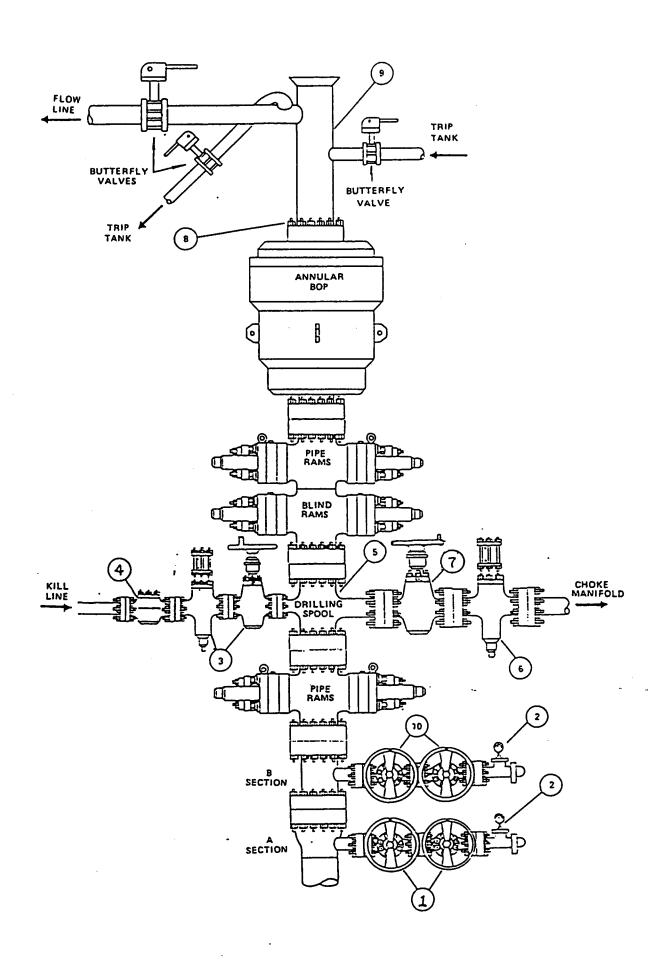
KANE SPRINGS FED. #11-1 SECTION 11, T26S, R19E S.L.B.&M.



Section a - a

Exhibit C-1 20" BELL NIPPLE 20" ROTETING HEAD 10" BLOOEY LINE 2000 PCI WORKING PRESSURE 20" ANNULAR 20" Casing Head 200075= W.P.

> "5 ح بى نىرا 5 يىر ح



TYPICAL - 4 PREVENTOR BOPE ST' \(\circ\)

OFFSHORE LOUISI.

Exhibit C-

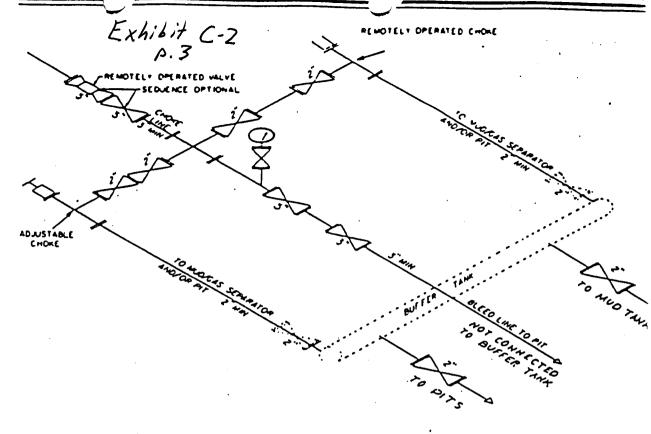
#### COMPONENT SPECIFICATIONS

- 1. Screwed or flanged plug or gate valves 2" minimum nominal dia. same working pressure as "A" section.
- 2. Tee with tapped bullplug, needle valve, and pressure gauge.
- 3. Flanged plug or gate valve 2" minimum nominal dia. same working pressure as BOP stack. Second valve up stream may be hydraulically controlled.
- 4. Flanged flapper type check valve 2" minimum nominal dia. same working pressure as BOP stack.
- 5. Drilling spool of sufficient height to allow stripping with 2 flanged side outlets 3" choke and 2" kill line minimum nominal dia. (See Table II-4 and Note D.)
- 6. Flanged hydraulically controlled gate valve 3" minimum nominal dia. same working pressure as BOP stack. (See Note D.)
- 7. Flanged plug or gate valve 3" minimum nominal dia. same working pressure as BOP stack.
- 8. Top of annular preventer must be equipped with an API flange ring gasket. All flange studs must be in place or holes filled in with screw type plugs.
- 9. The I.D. of the bell nipple must not be less than the minimum I.D. of the BOP stack.
- 10. Flanged plug or gate valve 2" minimum nominal dia. same working pressure as "B" section.

#### NOTE:

The choke line between the drilling spool and choke manifold should not contain any bend or turn in the pipe body. Any bend or turn required should be made with a running tee with a blind flange or welded bullplug. All connections should be flanged or welded. All fabrications requiring welding must be done by a certified welder. Welds should be stress relieved when required.

Plug valves should be equivalent to the Howco Lo-Torc and gate valves equivalent to the Cameron Type 'F'.



## 5M CHOKE MANIFOLD EQUIPMENT - CONFIGURATION MAY VARY

Although not required for any of the choice manifold systems, buffer tanks are sometimes installed downstream of the choke assemblies for the purpose of monifolding the bleed lines together. When buffer tonks are employed, volves shall be installed upstreom to isolate a failure or malfunction without interrupting flow control. Though not shown on 2M, 3M, 10M, or 15M drawings, it would also be applicable to those situations.

[FR Doc. 88-20736 Filed 11-17-86: 8:45 am]

## **FXHIBIT C-3**

# BLOWOUT PREVENTOR SCHEMATIC

**AVIARA ENERGY CORPORATION** 

WELL

: KANE SPRINGS FEDERAL UNIT 51239 #7-1

FIELD

: KANE SPRINGS

RIG

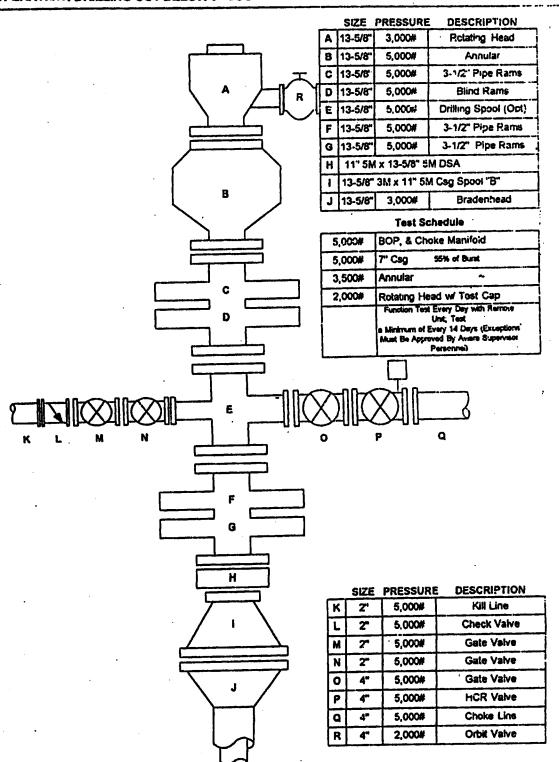
: TO BE DETERMINED

COUNTY

: GRAND COUNTY UTAK

STATE: UTAH

OPERATION: DRILLING OUT BELOW 7" CSG





## United States Department of the Interior

## **BUREAU OF LAND MANAGEMENT**

Moab District 82 East Dogwood Avenue Moab, Utah 84532

1790 (UT-062)

MAR 02 1998

FEB 26 1998

Dear Reader:

Attached is a copy of a proposed action for an environmental assessment (EA) being prepared by the BLM Moab District. EA UT-062-98-054 will analyze the impacts of drilling five oil and gas wells in the Jug Rock, The Knoll, Big Flat, and Dee Pass areas of Grand County, Utah.

The proposed action is available for a 30-day public comment period. Comments must be submitted in writing by 4:30 p.m. on March 27, 1998 to be considered. Thank you for your participation.

Sincerely yours,

Assistant District Manager Resource Management

Enclosure

1. EA # UT-062-98-054 (Proposed Action)

#### INTRODUCTION

The Grand Resource Area Resource Management Plan (RMP) was approved in June 1985. The RMP selected Alternative C from the 1983 Environmental Impact Statement (EIS) prepared for the RMP. Alternative C analyzed the cumulative impacts of drilling 145 wells annually throughout the Grand Resource Area (RMP, Appendix A, page A-11). In December 1988, the RMP Oil and Gas Supplemental Environmental Assessment (EA), EA# UT-060-89-025, was approved. The EA incorporated the Supplemental Program Guidance from Bureau of Land Management (BLM) Manual 1624.2 that was adopted in 1986. The Supplemental Program Guidance included the preparation of a Reasonably Foreseeable Development (RFD) based on historic drilling, current market trends, and industry forecasts. The RFD for EA# UT-060-89-025 projected or estimated 10 wells would be drilled within the Paradox Fold and Fault Belt between 1989 and 1995.

In June 1993, with the drilling of the Kane Springs 20-1 well, ten well sites had been constructed and nine wells had been drilled. When Applications for Permit to Drill (APDs) were submitted on Federal oil and gas leases after the drilling of the 20-1 well, the Grand Resource Area notified the operator that processing of the APD would be delayed: "any additional wells within the greater Big Flat area will be postponed until an EIS is prepared to address impacts from full field development." BLM further advised operators that future APDs could "conceivably result in the drilling of an 11th well in this area, putting us beyond the cumulative well threshold." However, BLM has always held that the ten well threshold could be exceeded to obtain information necessary to prepare a field development EIS. A list of pending APDs appears later in this document.

There are currently 5 producing wells within the Paradox Fold and Fault Belt of the Grand Resource Area that have been drilled since 1988. Four of these wells are within the Kane Springs Unit operated by Aviara Energy Corporation (formerly operated by Columbia Gas Development), the fifth is a non-unit well operated by Coastal within the unit boundary:

```
Kane Springs Unit 19-1A, T. 26 S., R. 20 E., section 19;
Kane Springs Unit 27-1, T. 25 S., R. 19 E., section 27;
Kane Springs Unit 34-1, T. 25 S., R. 19 E., section 34;
Kane Springs Unit 10-1, T. 25 S., R. 18 E., section 10;
Coastal 16-1, T. 25 S., R. 18 E., section 16 (State Lease).
```

There are 3 wells that have been drilled and temporarily abandoned since 1988:

```
Kane Springs Unit 28-1, T. 25 S., R. 19 E., section 28;
Kane Springs Unit 20-1, T. 26 S., R. 19 E., section 20;
Central Resources (drilled by Giant) Hatch Point #1, T. 29 S., R. 21 E., section 14.
```

There have been 2 wells drilled, plugged, and reclaimed since 1988:

```
Chevron 1-36, T. 27 S., R. 20 E., section 36 (State Lease); Burlington Resources 22-33H, T. 27 S., R. 21 E., section 33.
```

One well site was constructed, not drilled, and reclaimed:

Exxon (constructed by Meridian) 33-4H, T. 26 S., R. 19 E., section 4.

Prior to 1997, Moab District had 8 APDs pending in the Paradox Fold and Fault Belt. None of those APDs were proposed in areas that would provide new geologic information to help determine the actual extent or boundaries of the Paradox Fold and Fault Belt, and the Moab BLM Office did not consider any of these proposed wells to be "rank wildcat wells", (i.e. wells located over one mile from any previous drilling outside of the Big Flat area). None of those APDs were processed, and several suspensions of lease operations and production were granted.

Between 1993 and 1997, BLM tried to determine the extent of the oil and gas resources that could be developed within the Paradox Fold and Fault Belt in order to delineate an area to analyze in a National Environmental Policy Act (NEPA) document for full field development. The wells that had been drilled since 1988 were located within the areas categorized in the RFD as having high and moderate potential for the occurrence of oil and gas, but it was not possible to delineate any specific areas for future development. The Paradox Fold and Fault Belt covers approximately 1/2 of the Grand Resource Area, and the drilling had been spread over 1/3 or more of the Paradox Fold and Fault Belt. It is not feasible to analyze full field development over an area of 250,000 to 500,000 acres, and further efforts for analyzing full field development have been postponed by BLM.

Early drilling success made Columbia Gas Development and other area lessees confident that the area would progress into development rather quickly. They advised BLM that they planned on preparing a field development EIS. At the time it appeared that ten wells would provide adequate exploration of the play. However, unexpected dry holes and inability to reduce drilling costs caused them to reconsider. Faced with geology and drilling conditions that were more complicated than originally thought, they concluded that development of the play was still in question, and it would be premature to invest in a field development EIS without more exploratory information.

Columbia Gas Development never concurred with BLM's determination that the Kane Springs Unit had entered a stage of full field development. When BLM rescinded the APD for the Kane Springs Unit 36-1 Well, based on BLM's determination that the Kane Springs Unit was entering a stage of full-field development; Columbia requested a State Director Review. Columbia maintained that the geologic and reservoir data indicated that drilling within the Kane Creek Unit was exploratory, not developmental. The State Director remanded the case back to Moab District on August 27, 1993, and directed Moab District to analyze additional geologic and reservoir data to determine if the well was exploratory or developmental. Although Columbia did not proceed with the drilling of the 36-1 Well based on business considerations, they maintained that geologic and reservoir data indicated that the 36-1 Well was exploratory, not developmental.

During May 1997, Aviara Energy Corporation (formerly Columbia Gas Development) met with BLM personnel in the Moab Office and presented information indicating that all of their producing wells were located in separate reservoirs, and that additional drilling adjacent to their producing wells was still exploratory, rather than developmental. Production histories and interference tests from the horizontal wells drilled during the 1990's confirm that no two of the existing wells are producing from the same reservoir.

The geologic target in this area is the Cane Creek zone of the Paradox Formation. The Cane Creek is a fractured shale, with oil accumulating in the fractures. Wells that intercept these fractures tend to produce very well whereas wells that do not intercept fractures do not produce. Available information indicates that these fracture systems are not interconnected over large distances, and to date, each producing well is in its own isolated fracture system. The fractures tend to be nearly vertical, so horizontal drilling is employed to dramatically increase the chances of intercepting a fracture. Because the target is not simply a geologic horizon, but rather, isolated fracture systems within a geologic horizon, exploration of the Cane Creek is particularly challenging. In addition to the physical data derived from drilling, the proposed wells are designed to contribute to the understanding of the influence of tectonic features on the fracture systems and the effectiveness of geophysical data interpretation in predicting fracture system occurrence and orientation. Such information will allow geologists to utilize existing data to more accurately map the target.

While lessees, operators and the BLM had several years to interpret data obtained in the early 1990's and the successful horizontal wells established a production history, we are still unable to define a reasonable scenario for future development to be carried forward in a NEPA document. Based on current information, any RFD or NEPA analysis prepared at this time would be short-sighted. Prior to initiating an amendment to the RMP (including new RFD, NEPA document), it would be beneficial to gather additional geologic data on the limits of the Paradox Fold and Fault Belt or on the existing producing reservoirs. Without additional information on the extent of the producible reservoirs or the parameters of the existing reservoirs; a NEPA analysis at this time would have to be of broad scope, would not be prepared on the actual potential for field developments, and would not have specific locations where wells or fields would be developed.

In summary, (1) the production histories from the horizontal wells do not support the concept that the 5 producing wells in the Big Flat - Bartlett Flat areas of the Kane Springs Unit have entered a stage of field development, and (2) BLM's 1993 assumption that the drilling in the Big Flat - Bartlett Flat areas of the Kane Springs Unit had reached a stage of full field development was not accurate. If BLM initiated the preparation of NEPA documentation, either an EA or EIS, for full field development at this time; there would not be enough geologic data to focus the analysis on site specific areas for full field development, and the analysis would be over a broad area encompassing over half a million acres within the Paradox Fold and Fault Belt of the Grand Resource Area. In order to develop a new RFD to focus the scope of future development, additional geologic information would be required. Based on this information, BLM reconsidered options for approving additional exploratory drilling to help collect geologic data on the extent of the oil and gas reserves within the Paradox Fold and Fault Belt and the parameters of the existing oil reservoirs which may be more isolated than originally assumed.

Following their meeting with BLM in May 1997, Aviara Energy Corporation located three potential well sites within the Kane Creek Unit that could be drilled to provide additional information that would be useful to test geologic theories and to confirm reservoir occurrence or reservoir production parameters. Aviara personnel worked with the BLM to select potential well sites that would reduce new surface disturbances and visual impacts.

On November 21, 1997, Moab District mailed a letter to the operators with pending APDs or lease suspensions within the Paradox Fold and Fault Belt. The letter notified operators that BLM was prepared to examine additional proposals which would help define a reasonable scenario for future development of the Cane Creek play or Paradox Fold and Fault Belt. BLM requested that lessees proposing to conduct operations in the play submit those proposals for evaluation, and the proposals would be evaluated on a case-by-case basis to determine whether the information to be obtained will provide specific information as to the feasibility of developing the Cane Creek as a producing field. The letter requested that proposals be submitted by December 31, 1997.

Aviara, Intrepid Oil and Gas, and Riata Energy, Inc. contacted BLM regarding options for exploratory drilling operations that could provide the types of information requested by BLM. On December 31, 1997, the Moab BLM Office had pending 12 APDs within the Paradox Fold and Fault Belt. BLM screened the 12 pending APDs to determine which of them could be classified as exploratory based on the distance from known production.

Six of the 12 APDs were for wells that could be classified as exploratory:

```
Riata, #5-1 Well, T. 23 S., R. 18 E., section 5;
Riata, #9-1 Well, T. 23 S., R. 18 E., section 9;
Aviara, Kane Springs Unit 7-1 Well, T. 25 S., R. 19 E., section 7;
Aviara, Kane Springs Unit 11-1 Well, T. 26 S., R. 19 E., section 11;
Exxon, Shafer #1 Well, T. 27 S., R. 20 E., section 11; and
Exxon, Hatch Point #1 Well, T. 27 S., R. 21 E., section 33.
```

The other 6 pending APDs were considered developmental in nature due to their proximity to producing wells:

```
S.W. Energy, #9-1 Well, T. 23 S., R. 17 E., section 9;
Coastal, Kane Springs Unit 21-1 Well, T. 25 S., R. 18 E., section 21;
Columbia (Aviara), Kane Springs Unit 36-1 Well, T. 25 S., R. 19 E., section 36;
Columbia (Aviara), Kane Springs Unit 18-1 Well, T. 26 S., R. 20 E., section 18;
Celsius, Largo #1 Well, T. 26 S., R. 20 E., section 15; and
Aviara, Kane Springs Unit 30-1 Well, T. 26 S., R. 20 E., section 30.
```

Although Exxon's Hatch Point #1 Well appeared to be exploratory, the well would be located within 1 mile of two plugged and abandoned wells and two temporarily abandoned wells. Based on the geologic and production information available for the adjacent wells, BLM determined that the Exxon Hatch Point #1 Well would not provide the types of information needed prior to revising the RFD or the RMP and that the APD would not be processed at this time.

The visibility of the proposed Exxon Shafer #1 Well may be screened from Dead Horse Point State Park; however, the well would be within the viewshed of Anticline Overlook. BLM considers the impacts and potential conflicts associated with drilling a well (and potentially developing an oil and gas field) in Shafer Basin as issues better addressed through the RMP. The potential impacts from locating a well anywhere within Shafer Basin would be beyond the scope of this EA, and BLM will postpone the processing of the APD for the Exxon Shafer #1 Well.

During the initial geologic screening of the pending APDs, Aviara's Kane Springs Unit 30-1 Well was considered developmental due to its proximity to a producing well, the Kane Springs Unit 19-1A Well. When originally staked by Aviara, using the existing geophysical data, this well was located in T. 26 S., R. 19 E., section 25 (Oil and Gas Lease UTU-67558), approximately 1/2 mile southwest of the 30-1 Well. Oil and Gas Lease UTU-67558 was issued with an oil and gas leasing stipulation for no surface occupancy in section 25. When reviewing options for horizontally drilling from adjacent locations to hit the target in section 25, Aviara considered two sites for relocating the well. BLM checked both of the options in the field with Aviara, and BLM preferred the location for the 30-1 Well (section 30) over the other option in section 24 which would have been over 1 mile west of the 30-1 Well. BLM considers the proposed location for the 30-1 Well as less of a visual impact than the other option which would be located closer to the road to Canyonlands National Park. As a result of following BLM's recommendation to reduce potential visual impacts, Aviara moved the surface location of the 30-1 Well from an area that would have been exploratory to an old drill site that is closer to a producing well (19-1A Well). The original subsurface target in section 25 was not changed by moving the surface location of the well into section 30. The drilling of the 30-1 would test the validity of geophysical data interpretation which would be used in selecting well locations across the area. This type of information would be useful prior to preparing a new RFD and RMP update, and BLM will analyze the 30-1 Well in this EA.

#### **NEED FOR THE PROPOSED ACTION**

Based on the BLM's screening and review of the pending APDs, as specified in the previous section; five APDs were selected for processing in this EA.

Aviara Energy submitted Applications for Permit to Drill (APD) three wells in the Kane Springs Unit, on December 17, 1997:

```
Kane Springs Federal 7-1 Well, Oil and Gas Lease UTU-51239;
Kane Springs Federal 11-1 Well, Oil and Gas lease UTU-65972; and
Kane Springs Federal 30-1 Well, Oil and Gas Lease UTU-46697.
```

On October 24, 1997, Riata submitted an APD for the #9-1 Well, and on November 20, 1997, Riata submitted an APD for the #5-1 Well:

```
#5-1 Well, Oil and Gas lease UTU-75891; and #9-1 Well, Oil and Gas Lease UTU-75891.
```

All of the proposed wells would be located on Federal oil and gas leases with Federal surface locations administered by the BLM.

The APD is the mechanism whereby the lessee/operator requests approval to exercise their lease rights to explore for and possibly develop Federal oil and gas resources. The drilling of the proposed wells would determine if oil and gas reserves could be recovered at the proposed locations.

In addition to testing the feasibility of producing oil and gas reserves at the proposed locations, all five of the proposed wells would provide additional geologic and reservoir data. The drilling of the three Aviara wells would provide additional geologic and reservoir data that would help delineate the boundaries of the Paradox Fold and Fault Belt and help define the parameters of the oil and gas reservoirs. The Aviara wells would also test three different geological theories for predicting the location of reservoirs. The #5-1 and #9-1 Wells proposed by Riata would be 4 miles away from the nearest production, and these wells would test a new horizon. The geologic and reservoir information is needed for establishing a new RFD and for determining the boundaries of the productive areas within the Paradox Fold and Fault Belt.

This EA will document the impacts and mitigation for drilling the 5 wells and will update the cumulative impacts of drilling 5 wells within the Paradox Fold and Fault Belt of the Grand Resource Area.

## **CONFORMANCE WITH LAND USE PLAN**

This proposed action has been determined to be in conformance with the terms and conditions of the Grand Resource Area Resource Management Plan (RMP), approved July 1985, as required by 43 CFR 1610.5. This is shown on page 15 of the plan and reads as follows: "to keep public lands open for exploration and development of mineral resources while protecting areas with sensitive resource values."

The proposed locations for the two Riata wells, Aviara 7-1 Well, and the Aviara 11-1 Well are in areas with no special oil and gas leasing stipulations identified in the RMP (Category 1 area). The Aviara 30-1 Well would be located in a Category 3 area with oil and gas leasing stipulations for no surface occupancy that were developed in the RMP. However, Oil and Gas Lease UTU-46697 at the proposed location for the 30-1 Well was issued prior to the approval of the RMP; and therefore, Lease UTU-46697 was issued without the no surface occupancy stipulation. Oil and Gas Lease UTU-46697 is held by production, and it is unlikely that a new lease would be issued in the near future.

The Supplemental Program Guidance (SPG) for fluid minerals (1624.22 C.) specify RFDs should be projected as number of wells and fields. The RFD projections are also linked to cumulative impacts, which are generally measured in acreage of surface disturbance for the construction of well sites, roads, and pipelines. The 1988 RMP Oil and Gas Supplemental EA estimated an average well would result in 6.5 acres of surface disturbance. In March of 1993, the average surface disturbance for a well within the Paradox Fold and Fault Belt was approximately 4 acres (EA# UT-068-93-031). The cumulative impacts of the drilling from 1988 through 1993 is less than the 65 acres estimated for 10 wells in the existing RFD for the Paradox Fold and Fault Belt. The 1988 RMP Oil and Gas Supplemental EA assumed that 50 percent of the wells would be productive and 50 percent would be abandoned and reclaimed. The EA also assumed revegetation would be successful within a scope of 10 years. Based on the drilling that has occurred within the Paradox Fold and Fault Belt since 1988, these assumptions from the existing RFD would still be valid.

The Potash-Confluence Habitat Management Plan (HMP) encompasses the areas of the proposed actions. The goals and objectives for the Potash-Confluence HMP have been developed to protect and enhance habitat for desert bighorn sheep, peregrine falcon, riparian habitat, <u>Cycladenia humilis</u> which is an endangered plant, deer, and elk.

All of the proposed wells would be in areas grazed as part of the Big Flat - Ten Mile allotment, and an Allotment Management Plan (AMP) has been developed for the area. The implementation of the AMP would not be affected by the proposed actions as long as the surface impacts from the proposed actions were properly mitigated.

This environmental assessment (EA) tiers to the Environmental Analysis Record for Proposed Oil and Gas Leasing in the Grand Resource Area (1975), the EIS for the Grand Resource Area Management Plan (1983), and the RMP Oil and Gas Supplemental EA UT-060-89-025 (December 14, 1988). EA UT-068-91-079 for the Western Gas Gathering Pipeline, EA UT-068-91-080 for the Chevron Green River Federal #1-20 Exploratory Well, EA UT-068-91-082 for the Columbia Gas Development Corporation Kane Springs Federal #10-1 and #20-1 Exploratory Oil Wells, and UT-068-93-031 for the Kane Springs Federal 25-19-34-1 Well provide additional information on affected environments and potential impacts from similar projects.

## **RELATIONSHIP TO STATUTES, REGULATIONS, OR OTHER PLANS**

The exploration, development and production of Federal oil and gas leases is regulated by 43 CFR 3160, Onshore Oil and Gas Orders, and Notices to Lessees and operators (NTLs).

The proposed action is consistent with Grand County's 1979 Master Plan for Development.

The proposed action would meet the BLM's policy to manage energy and mineral resources on public lands in accordance with the provisions of the Mining and Minerals Policy Act of 1970 and the Federal Land Policy an Management Act of 1976 (FLPMA). The Mining and Minerals Policy Act of 1970 declares that it is the continuing policy of the Federal government to encourage and facilitate private enterprise in the development of a stable domestic minerals industry and the orderly and economic development of domestic mineral resources. FLMPA reiterates the Nation's need for domestic sources of mineral and other resources and requires that public lands be managed accordingly.

In keeping with these policies, the BLM actively facilitates the development by private industry of public land mineral resources in a manner that satisfies national and local needs and provides for economically and environmentally sound exploration, extraction, and reclamation practices (BLM Manual Section 3000.06).

#### PROPOSED ACTION AND ALTERNATIVES

The proposed action would require the construction and maintenance of a well pad to drill, produce and eventually plug/abandon an oil well at each of the proposed locations. The Surface Use Plans submitted with the APDs provide specifications for construction, operation, and restoration of the well sites. The Surface Use Plans were developed during onsite inspections of the proposed well sites. Representatives from the oil companies and BLM participated in the onsite inspections.

The Surface Use Plans for the Aviara wells and the Riata wells are substantially different from each other. Therefore, the information for the proposed action was separated into two headings; Aviara Wells and Riata Wells. Maps of the proposed wells and access routes are attached in Appendix A.

#### Aviara Wells

Kane Springs Federal 7-1 Well, T. 25 S., R. 19 E., section 7; Kane Springs Federal 11-1 Well, T. 26 S., R. 19 E., section 11; and Kane Springs Federal 30-1 Well, T. 26 S., R. 20 E., section 30.

Approximately 1.3 miles of an existing two-track road would be upgraded and 0.6 mile of new road would be constructed between the Spring Canyon road (Grand County Road #140) and the proposed location for the Kane Springs Unit 7-1 Well. The 11-1 Well would be located approximately 300 feet from State Route 313, and the proposed access would be constructed on a previous surface disturbance. The access for the 30-1 Well would follow 0.3 miles of the road to the 19-1A Well, and 0.7 miles of an existing two-track road would be upgraded. The existing roads and new roads would be flatbladed for the drilling operations. If a well was completed for production, the roads would require a road width of 35 feet to include the travel surface of 21 feet wide, ditches and topsoil berms.

The construction of a drilling location and well site would involve a surface disturbance of approximately 400 feet by 400 feet. The top 6 inches of soil would be removed and stockpiled. A lined reserve pit would be constructed within the surface disturbance of the proposed well site. Based on previous construction at Columbia wells, it is anticipated that the construction of a well pad could entail some blasting of rock.

The construction of a well site would require about 10 days, and the drilling operations would take approximately 50 days. Well testing and completion activities could take another 20-30 days.

Approximately 48 truckloads of equipment would be required to transport the drilling rig to the location. During the drilling phase, the use of 10-15 vehicles per day would be anticipated. Trucks hauling water for drilling would also be on the highway. One or two vehicles would travel to the well each day during production to inspect and maintain equipment. Depending on oil production and facilities constructed for production handling, one tanker truck would transport oil every 1-2 weeks.

Initially, drilling of the well would utilize an air drilling system, with cuttings contained in a blooie pit. The blooie line would be misted to control dust. An oil-base drilling mud would be used to finish the drilling. Oil-based muds have been the most successful when drilling horizontal wells, and any alternative muds would need to meet very specific parameters for the anticipated drilling conditions. All fluids used during the drilling or testing of the well would be contained in a fenced reserve pit. The reserve pit would be fenced on three sides during drilling operations and the fourth side would be fenced when the rig moves off the location. After the fluids have been removed or evaporated, the reserve pit contents would be stabilized, covered with the subsoil stockpiled during construction of the pit, and reclaimed. Sewage would be contained in a chemical toilet during the drilling operations. Trash would be stored in a portable self-contained trash cage and hauled to an approved sanitary landfill when the drilling is completed.

If commercial production is established, the production facilities would probably be located on the well pad. An area of approximately 400 feet by 300 feet (2.75 acres) would be needed for production operations. The majority of this area would be occupied by production facilities. It is anticipated that a wireline truck would be on location every 2-3 weeks to remove paraffin from the well. The entire well pad would be required during future down-hole maintenance operations.

It may be feasible to pipe production from the 30-1 Well to the 19-1A Well. In the event that oil can be piped to the 19-1A battery, there may be an opportunity to utilize some of the existing production facilities at the 19-1A Well and to eliminate some of the production facilities that would be located at the 30-1 Well.

The specific design and layout of a production facility would be based on the volume of production during the well tests, cut and fill logistics at the well site, and potential visual impacts from the equipment. The anticipated production facilities would include a tank battery, heater treater, separator, circulation pump and flare pit. A typical tank battery would include 3-4 tanks (500 barrel capacity per tank) to contain oil and an additional tank for produced water. The tank battery and production equipment would be surrounded by a berm adequate to contain any fluids lost during production handling or discharged in the event of a spill. The well pad (or certain portions of the tank battery, treater, and flare pit) would probably be fenced to exclude livestock. It is anticipated that a pumping unit would be needed to produce the well after 2 years of production. Internal combustion engines associated with production facilities would be equipped with noise reducing mufflers. All permanent production facilities would be painted a neutral nonreflective color. If the well is a producer, additional upgrading and maintenance would be needed for drainage control on the new road. Unless pipelines were constructed to this area, oil production would be hauled from the well site by tanker trucks and gas would be flared pursuant to the guidelines in NTL-4A. Any salt water produced at the well would be hauled to an approved disposal site unless alternate disposal methods were authorized according to Onshore Oil and Gas Order 7.

If the well is not developed into a producing well or when it is no longer commercially productive, the well would be plugged. Gravel would be removed from the areas requiring reclamation. The well pad and access road would be recontoured, topsoil replaced, scarified, and seeded as specified by BLM.

#### Riata Wells

```
#5-1 Well, T. 23 S., R. 18 E., section 5; and #9-1 Well, T. 23 S., R. 18 E., section 9.
```

The #9-1 Well would be located approximately 300 feet from a Grand County Road #138, between the Ruby Ranch Road and the Moab Airport. The access for the #5-1 Well would follow an existing road that would be upgraded for approximately 1.8 miles, and approximately 0.3 miles of new road would be constructed to reach the well site for the #5-1 Well. The existing roads and new roads would be flatbladed for the drilling operations. If a well was completed for production, the roads would require a road width of 35 feet to include the travel surface of 18-20 feet wide, ditches and topsoil berms.

The construction of a drilling location and well site would involve a surface disturbance of approximately 300 feet by 175 feet. The top 6 inches of soil would be removed and stockpiled. A reserve pit of 40 feet by 20 feet would be constructed adjacent to the proposed well site.

The construction of a well site would require 2-5 days, and the drilling operations would take 5-10 20 days. Well testing and completion activities could take another 20-30 days.

During the drilling phase, there would be 3-5 vehicles driving to the well site each day. Trucks hauling water for drilling would also be using the Grand County roads. One or two vehicles would travel to the well each day during production to inspect and maintain equipment. Depending on oil production and facilities constructed for production handling, one tanker truck would transport oil every 1-2 weeks.

The Riata wells would be vertical wells; and the drilling operations would utilize an air drilling system. The blooie line would be misted with water to control dust, and cuttings would be contained in a pit. All fluids used during the drilling or testing of the well would be contained in a fenced reserve pit. The reserve pit would be fenced on three sides during drilling operations and the fourth side would be fenced when the rig moves off the location. After the fluids have been removed or evaporated, the reserve pit contents would be covered with the subsoil stockpiled during construction of the pit, and reclaimed. Sewage would be contained in a chemical toilet during the drilling operations. Trash would be stored in a portable self-contained trash cage and hauled to an approved sanitary landfill when the drilling is completed.

If commercial production is established, the production facilities would probably be located on the well pad. An area of approximately 300 feet by 160 feet (1.1 acres) would be needed for production operations. The majority of this area would be occupied by production facilities. It is anticipated that a wireline truck would be needed periodically to remove paraffin from the well. The entire well pad may be required during future down-hole maintenance operations.

As indicated in the previous section for the Aviara wells, the specific design and layout of a production facility would be based on the volume of production during the well tests, cut and fill logistics at the well site, and potential visual impacts from the equipment. The anticipated production facilities would probably include a tank battery, heater treater, separator, circulation pump and flare pit. A typical tank battery would include 2-3 tanks (200-500 barrel capacity per tank) to contain oil and an additional tank for produced water. The tank battery and production equipment would be surrounded by a berm adequate to contain any fluids lost during production handling or discharged in the event of a spill. It is anticipated that a pumping unit would be needed to produce the well after 2 years of production. All permanent production facilities would be painted a neutral non-reflective color. If the well is a producer, additional upgrading and maintenance would be needed for drainage control on the new road. Oil production would be hauled from the well site by tanker trucks and gas would be flared pursuant to the guidelines in NTL-4A. Any salt water produced at the well would be hauled to an approved disposal site unless alternate disposal methods were authorized according to Onshore Oil and Gas Order 7.

If the well is not developed into a producing well or when it is no longer commercially productive, the well would be plugged. Gravel would be removed from the areas requiring reclamation. The well pad and access road would be recontoured, topsoil replaced, scarified, and seeded as specified by BLM.

In addition to the Surface Use Plan, the APD includes a Drilling Program that provides specifications and mitigation for drilling through potential water and hydrocarbon zones, casing and cementing programs, pressure control equipment, drilling fluid programs, and well evaluation programs. The proposed Aviara wells would be drilled and completed as horizontal wells. The Riata wells would be drilled as vertical wells. The drilling information would be reviewed by a Geologist and Petroleum Engineer in the Moab District Office prior to the approval of the APD. The Moab District Engineer would also provide specifications for plugging the wells.

#### NO ACTION ALTERNATIVE

Under the no action alternative, an APD would not be approved for the proposed location. The existing environment would remain in its current condition, and there would be no new environmental consequences as a result of this alternative.

The lessee has the legal right to explore and develop oil and gas resources underlying the lease. Therefore, denying all efforts to exercise these lease rights is not a viable alternative. Selection of the no action alternative would likely result in the applicant submitting a new APD with a new surface location. This would be treated as a new proposed action requiring additional analysis.

#### **ISSUE IDENTIFICATION AND ASSUMPTIONS**

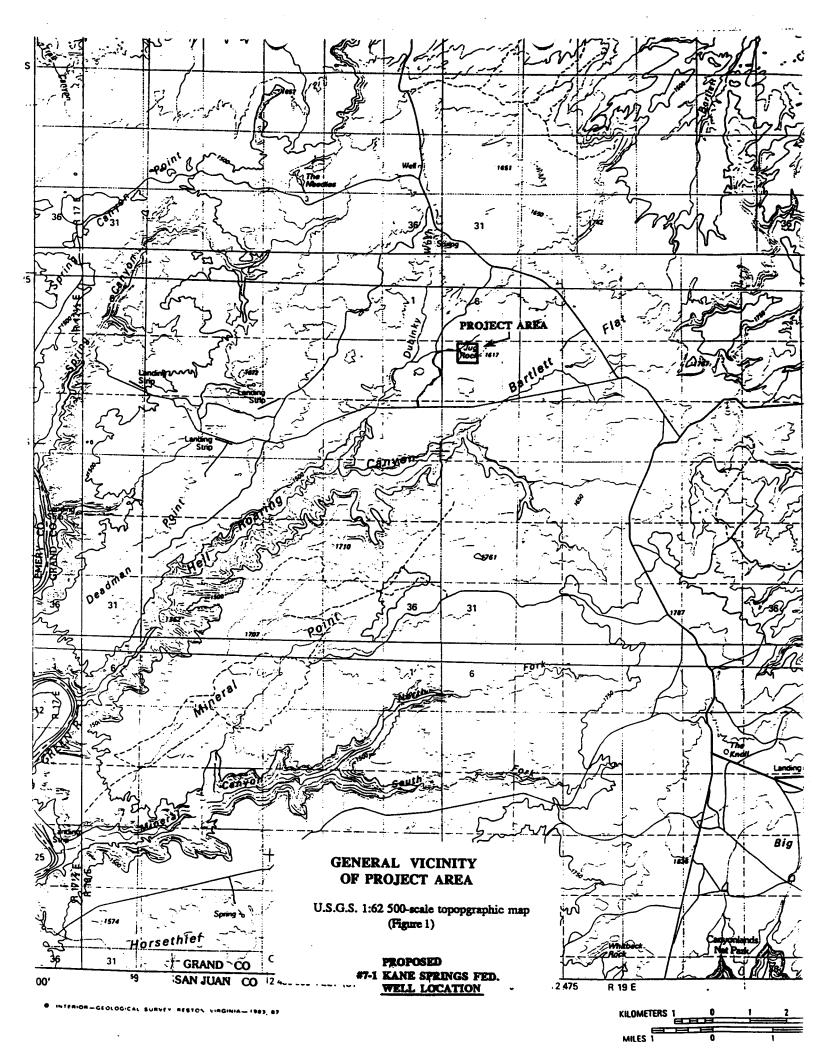
Based on previous public reviews and public comments received on wells in the Kane Springs Unit, BLM anticipates the majority of the issues for the Kane Springs wells will be related to visual or recreational valves. Personnel from Aviara Energy located the Kane Springs 11-1 and 30-1 Wells on old, reclaimed drilling locations to minimize new surface disturbances. BLM personnel checked proposed well sites with Aviara and discussed potential modifications for reducing impacts to visual resources.

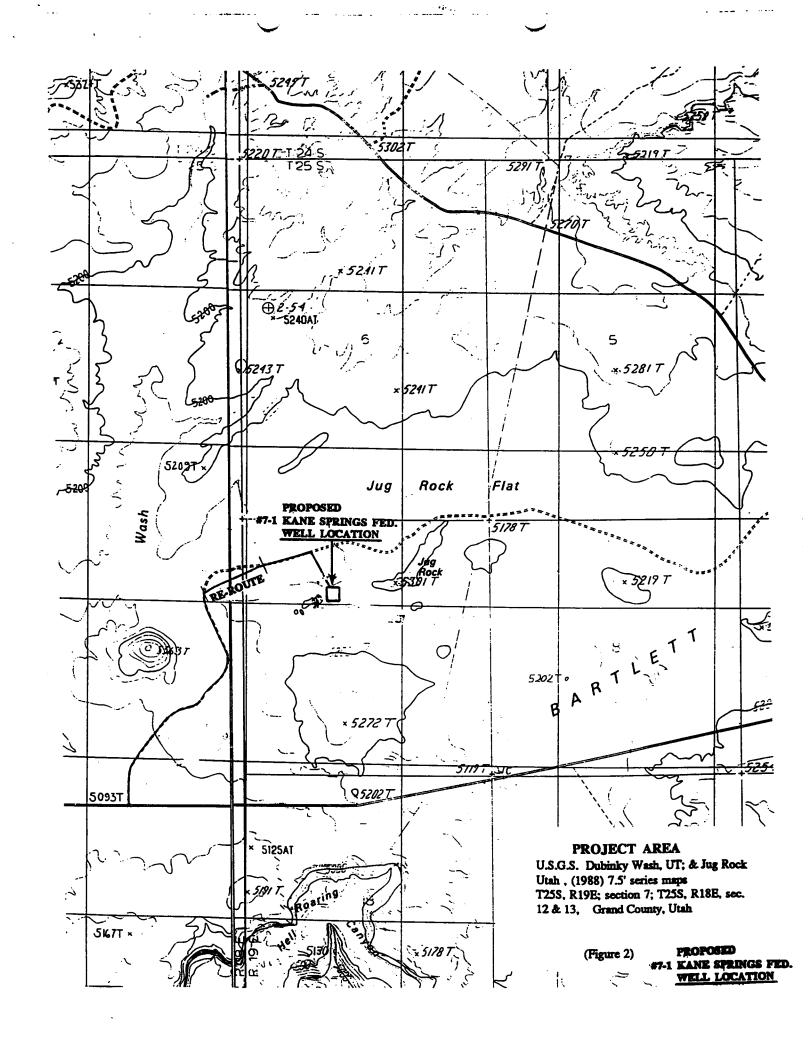
The Reader can assume that potential impacts to threatened and endangered (T&E) species and cultural resources from the proposed action would be analyzed in the EA and mitigation would be consistent with the Federal laws and regulations. This information would be documented in the EA.

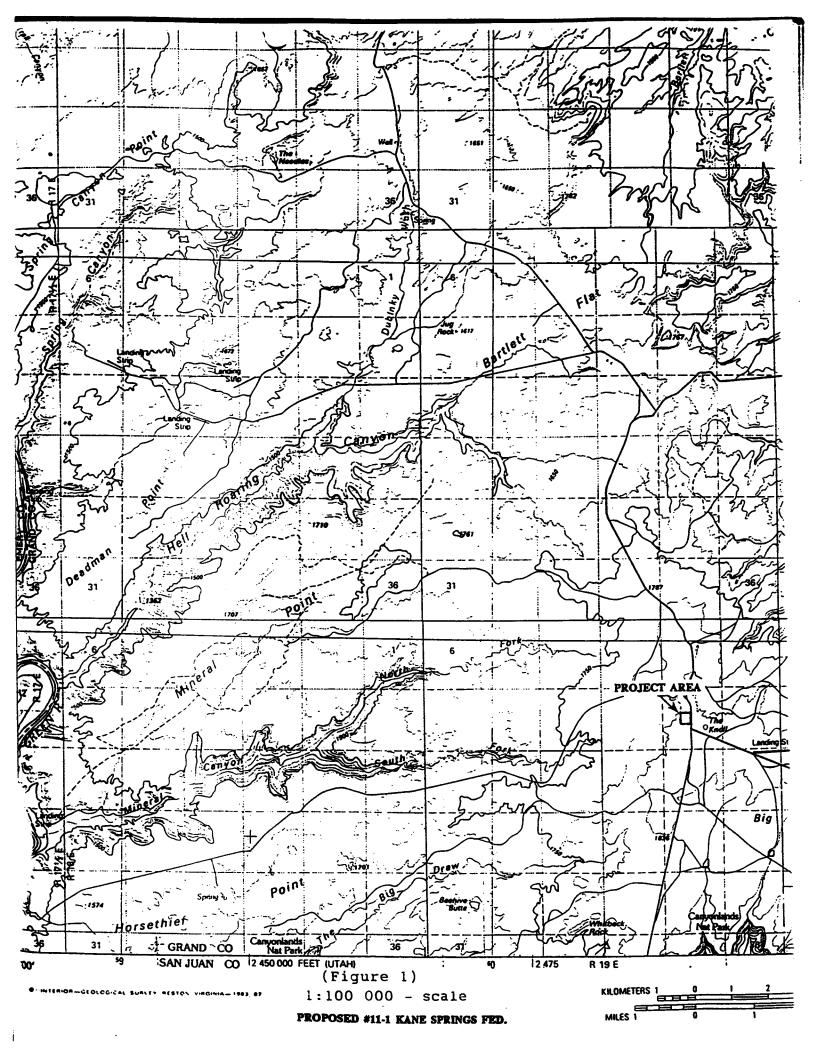
The EA would document the affected environment and environmental impacts to each affected resource. At this time, it is anticipated that the EA would have specific sections for Vegetation and Soil, Recreation, Visual Resources, Air Quality and Noise, Livestock Grazing, Wildlife/T&E Species, and Cultural Resources. Under the analysis for each resource, there would be headings for Affected Environment, Impacts, Mitigation, and Residual Impacts for the Proposed Action and No Action Alternatives. The cumulative impacts would be covered in a separate section of the EA and would address all affected resources.

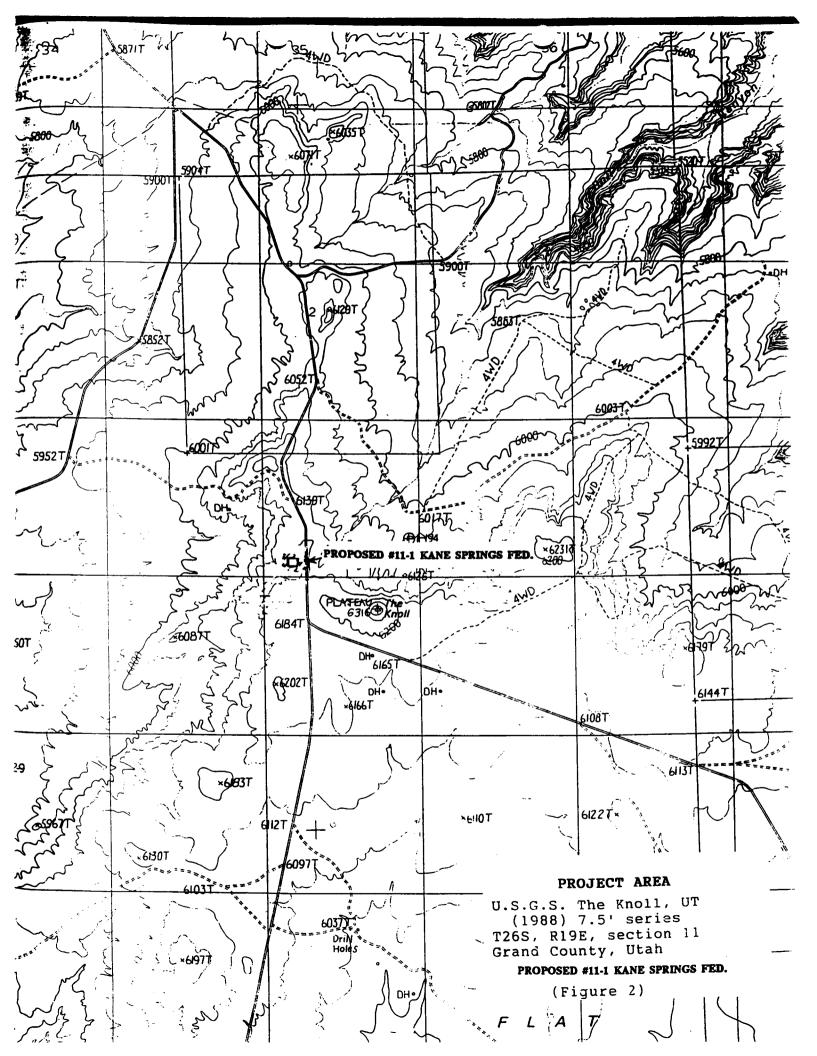
## **Appendix**

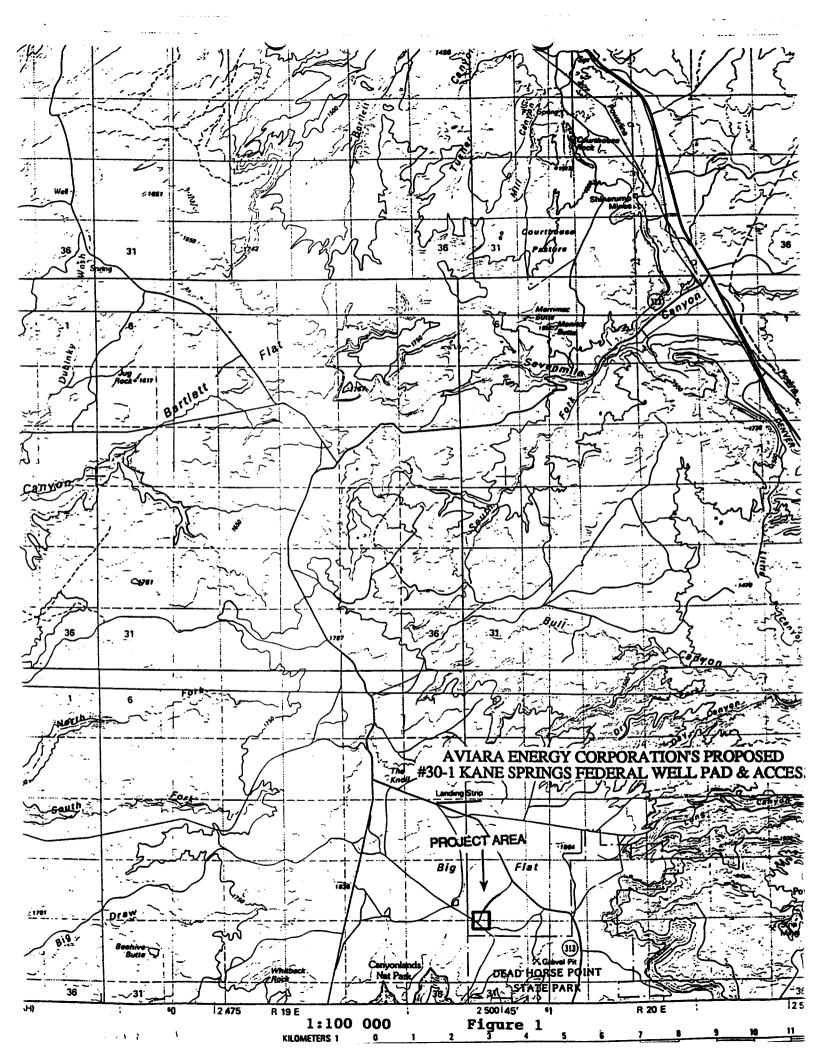
Appendix A - Two Maps for Each Proposed Well

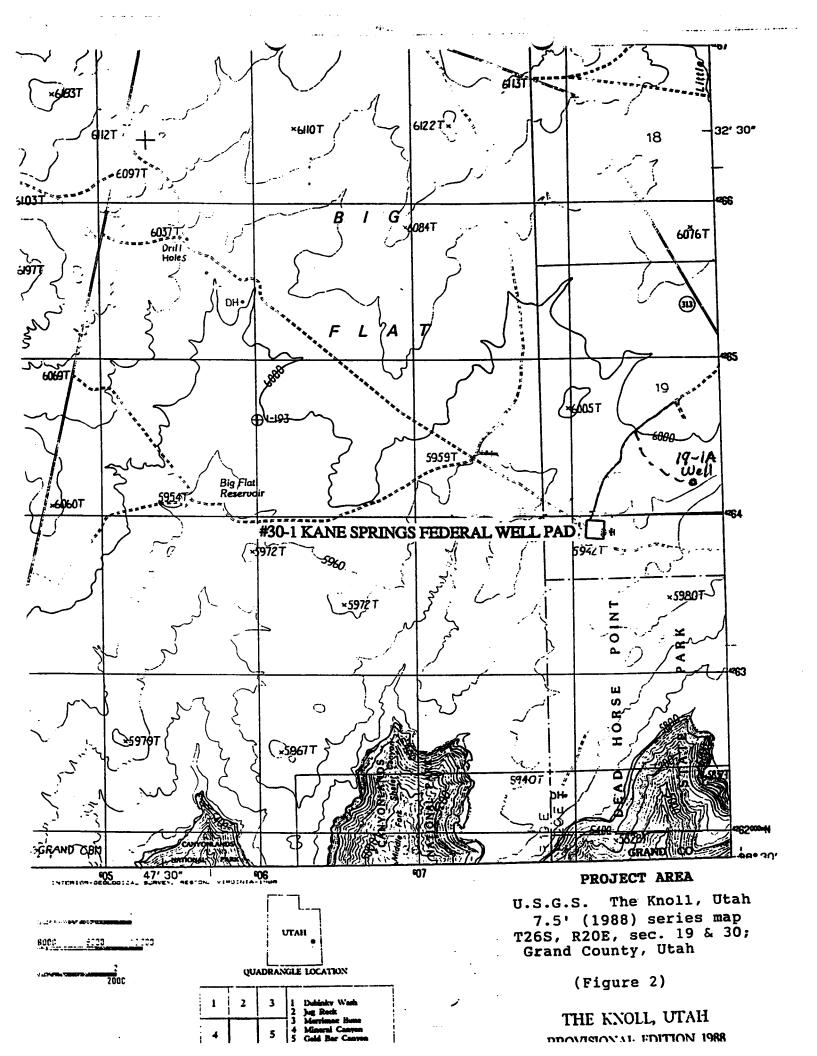


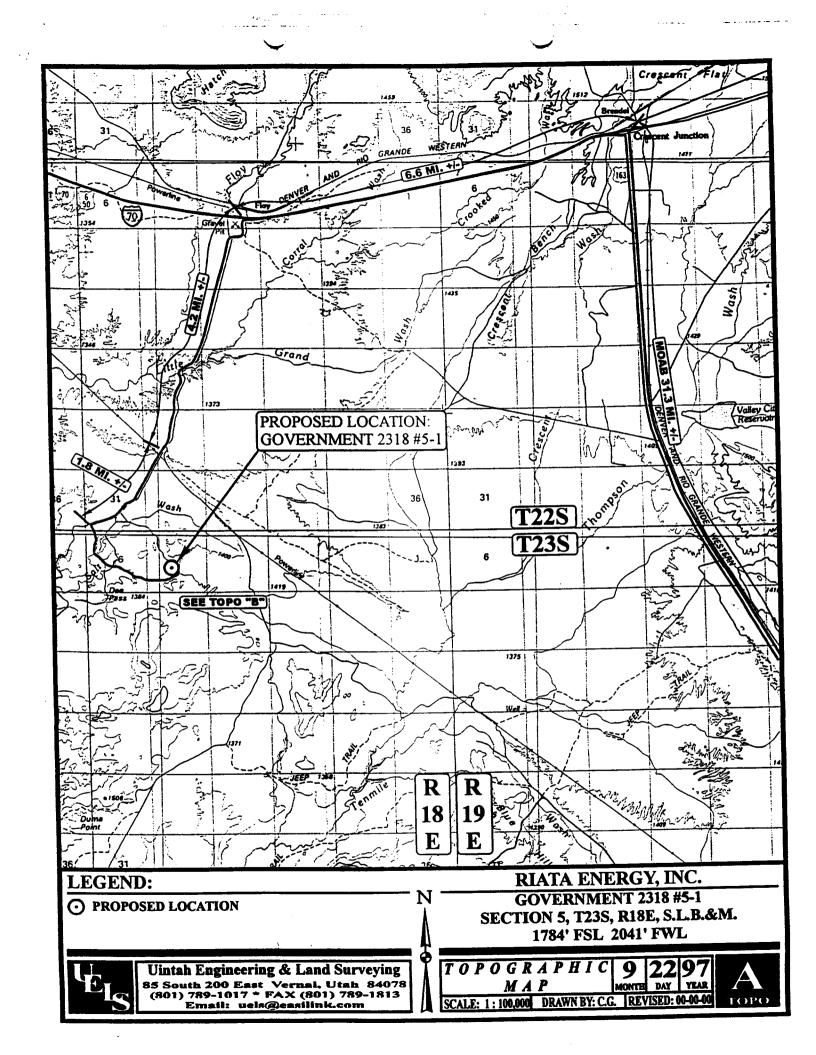


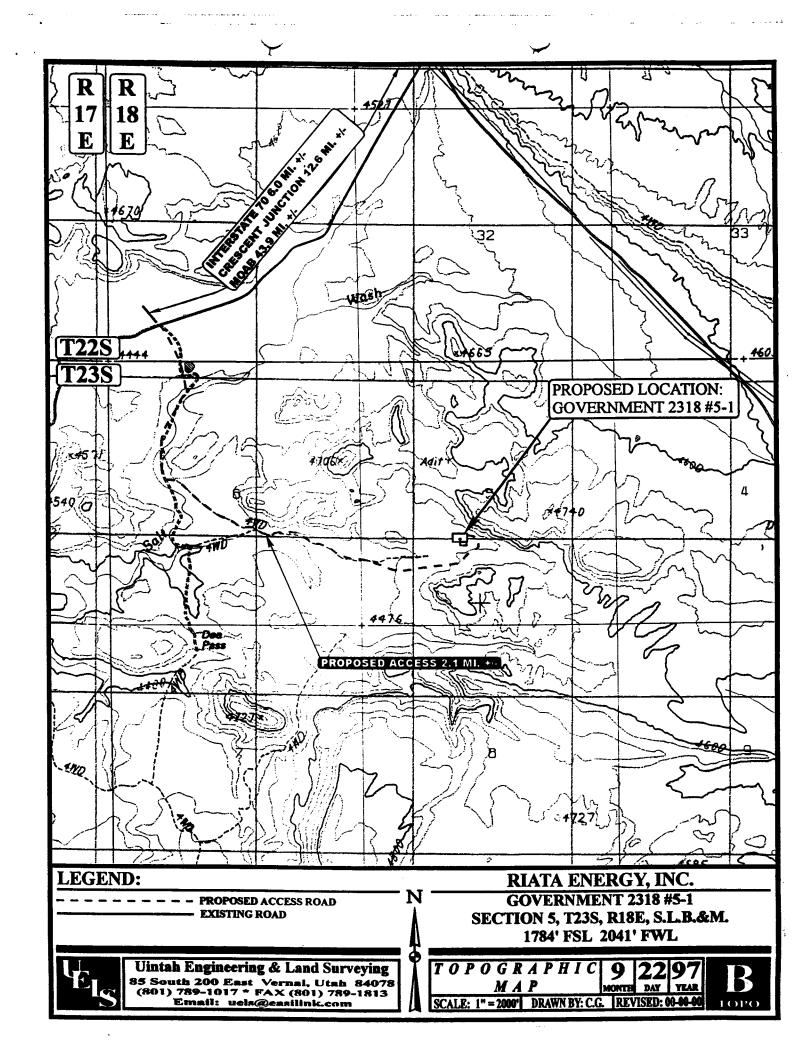


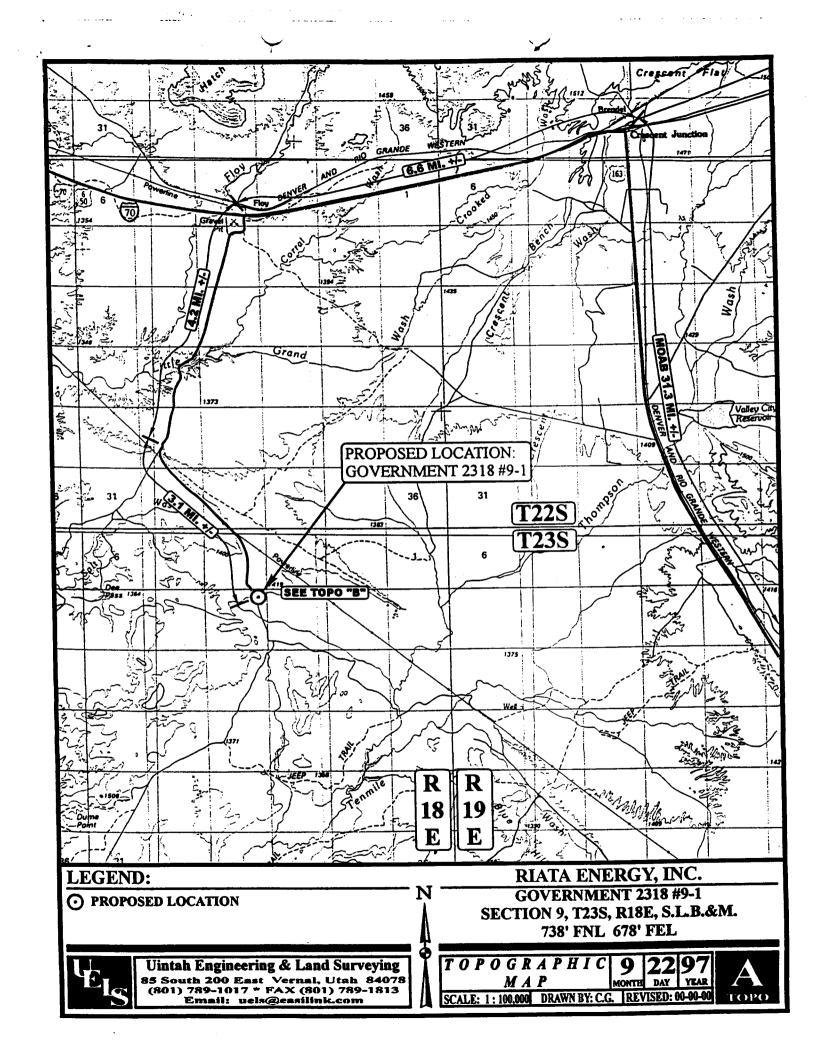


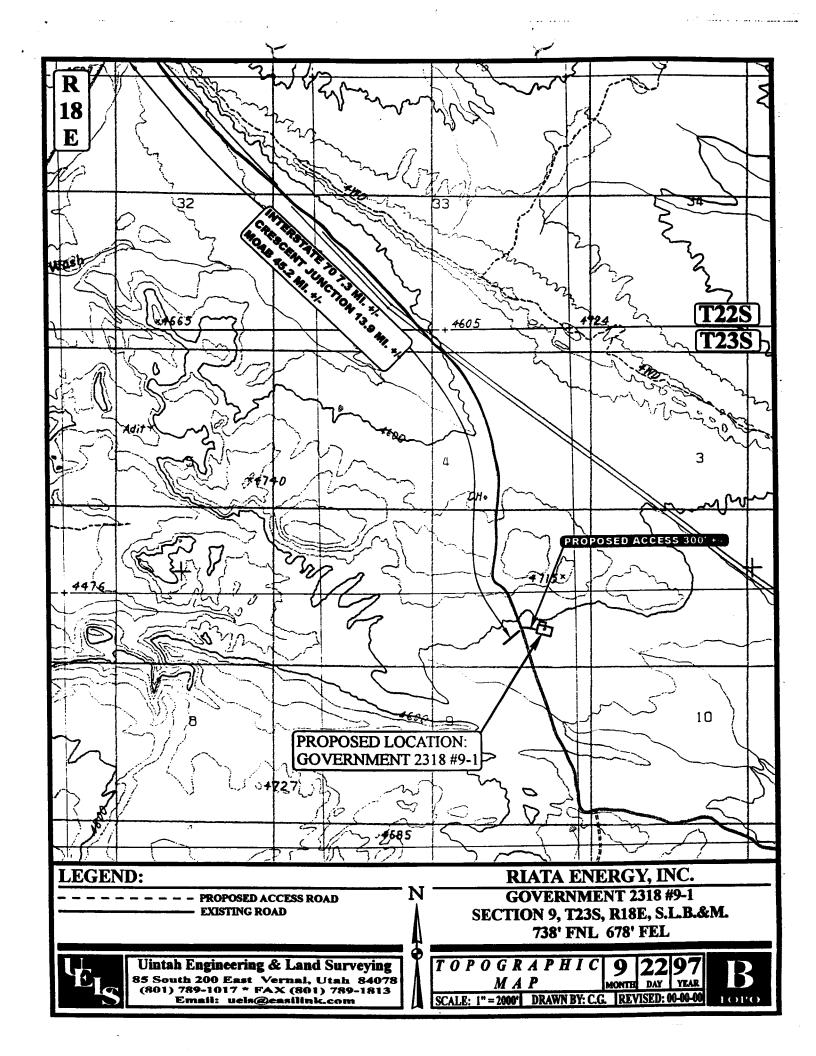














## United States Department of the Interior

## **BUREAU OF LAND MANAGEMENT**

Moab District 82 East Dogwood Avenue Moab, Utah 84532

MAR 02 1998

DEV OF OIL GAS & MORRES

1790 (UT-062)

Dear Reader:

FEB 26 1998

Attached is a copy of a proposed action for an environmental assessment (EA) being prepared by the BLM Moab District. EA UT-062-98-054 will analyze the impacts of drilling five oil and gas wells in the Jug Rock, The Knoll, Big Flat, and Dee Pass areas of Grand County, Utah.

The proposed action is available for a 30-day public comment period. Comments must be submitted in writing by 4:30 p.m. on March 27, 1998 to be considered. Thank you for your participation.

Sincerely yours,

Assistant District Manager Resource Management

Enclosure

1. EA # UT-062-98-054. (Proposed Action)

#### INTRODUCTION

The Grand Resource Area Resource Management Plan (RMP) was approved in June 1985. The RMP selected Alternative C from the 1983 Environmental Impact Statement (EIS) prepared for the RMP. Alternative C analyzed the cumulative impacts of drilling 145 wells annually throughout the Grand Resource Area (RMP, Appendix A, page A-11). In December 1988, the RMP Oil and Gas Supplemental Environmental Assessment (EA), EA# UT-060-89-025, was approved. The EA incorporated the Supplemental Program Guidance from Bureau of Land Management (BLM) Manual 1624.2 that was adopted in 1986. The Supplemental Program Guidance included the preparation of a Reasonably Foreseeable Development (RFD) based on historic drilling, current market trends, and industry forecasts. The RFD for EA# UT-060-89-025 projected or estimated 10 wells would be drilled within the Paradox Fold and Fault Belt between 1989 and 1995.

In June 1993, with the drilling of the Kane Springs 20-1 well, ten well sites had been constructed and nine wells had been drilled. When Applications for Permit to Drill (APDs) were submitted on Federal oil and gas leases after the drilling of the 20-1 well, the Grand Resource Area notified the operator that processing of the APD would be delayed: "any additional wells within the greater Big Flat area will be postponed until an EIS is prepared to address impacts from full field development." BLM further advised operators that future APDs could "conceivably result in the drilling of an 11th well in this area, putting us beyond the cumulative well threshold." However, BLM has always held that the ten well threshold could be exceeded to obtain information necessary to prepare a field development EIS. A list of pending APDs appears later in this document.

There are currently 5 producing wells within the Paradox Fold and Fault Belt of the Grand Resource Area that have been drilled since 1988. Four of these wells are within the Kane Springs Unit operated by Aviara Energy Corporation (formerly operated by Columbia Gas Development), the fifth is a non-unit well operated by Coastal within the unit boundary:

```
Kane Springs Unit 19-1A, T. 26 S., R. 20 E., section 19;
Kane Springs Unit 27-1, T. 25 S., R. 19 E., section 27;
Kane Springs Unit 34-1, T. 25 S., R. 19 E., section 34;
Kane Springs Unit 10-1, T. 25 S., R. 18 E., section 10;
Coastal 16-1, T. 25 S., R. 18 E., section 16 (State Lease).
```

There are 3 wells that have been drilled and temporarily abandoned since 1988:

```
Kane Springs Unit 28-1, T. 25 S., R. 19 E., section 28;
Kane Springs Unit 20-1, T. 26 S., R. 19 E., section 20;
Central Resources (drilled by Giant) Hatch Point #1, T. 29 S., R. 21 E., section 14.
```

There have been 2 wells drilled, plugged, and reclaimed since 1988:

```
Chevron 1-36, T. 27 S., R. 20 E., section 36 (State Lease); Burlington Resources 22-33H, T. 27 S., R. 21 E., section 33.
```

One well site was constructed, not drilled, and reclaimed:

Exxon (constructed by Meridian) 33-4H, T. 26 S., R. 19 E., section 4.

Prior to 1997, Moab District had 8 APDs pending in the Paradox Fold and Fault Belt. None of those APDs were proposed in areas that would provide new geologic information to help determine the actual extent or boundaries of the Paradox Fold and Fault Belt, and the Moab BLM Office did not consider any of these proposed wells to be "rank wildcat wells", (i.e. wells located over one mile from any previous drilling outside of the Big Flat area). None of those APDs were processed, and several suspensions of lease operations and production were granted.

Between 1993 and 1997, BLM tried to determine the extent of the oil and gas resources that could be developed within the Paradox Fold and Fault Belt in order to delineate an area to analyze in a National Environmental Policy Act (NEPA) document for full field development. The wells that had been drilled since 1988 were located within the areas categorized in the RFD as having high and moderate potential for the occurrence of oil and gas, but it was not possible to delineate any specific areas for future development. The Paradox Fold and Fault Belt covers approximately 1/2 of the Grand Resource Area, and the drilling had been spread over 1/3 or more of the Paradox Fold and Fault Belt. It is not feasible to analyze full field development over an area of 250,000 to 500,000 acres, and further efforts for analyzing full field development have been postponed by BLM.

Early drilling success made Columbia Gas Development and other area lessees confident that the area would progress into development rather quickly. They advised BLM that they planned on preparing a field development EIS. At the time it appeared that ten wells would provide adequate exploration of the play. However, unexpected dry holes and inability to reduce drilling costs caused them to reconsider. Faced with geology and drilling conditions that were more complicated than originally thought, they concluded that development of the play was still in question, and it would be premature to invest in a field development EIS without more exploratory information.

Columbia Gas Development never concurred with BLM's determination that the Kane Springs Unit had entered a stage of full field development. When BLM rescinded the APD for the Kane Springs Unit 36-1 Well, based on BLM's determination that the Kane Springs Unit was entering a stage of full-field development; Columbia requested a State Director Review. Columbia maintained that the geologic and reservoir data indicated that drilling within the Kane Creek Unit was exploratory, not developmental. The State Director remanded the case back to Moab District on August 27, 1993, and directed Moab District to analyze additional geologic and reservoir data to determine if the well was exploratory or developmental. Although Columbia did not proceed with the drilling of the 36-1 Well based on business considerations, they maintained that geologic and reservoir data indicated that the 36-1 Well was exploratory, not developmental.

During May 1997, Aviara Energy Corporation (formerly Columbia Gas Development) met with BLM personnel in the Moab Office and presented information indicating that all of their producing wells were located in separate reservoirs, and that additional drilling adjacent to their producing wells was still exploratory, rather than developmental. Production histories and interference tests from the horizontal wells drilled during the 1990's confirm that no two of the existing wells are producing from the same reservoir.

The geologic target in this area is the Cane Creek zone of the Paradox Formation. The Cane Creek is a fractured shale, with oil accumulating in the fractures. Wells that intercept these fractures tend to produce very well whereas wells that do not intercept fractures do not produce. Available information indicates that these fracture systems are not interconnected over large distances, and to date, each producing well is in its own isolated fracture system. The fractures tend to be nearly vertical, so horizontal drilling is employed to dramatically increase the chances of intercepting a fracture. Because the target is not simply a geologic horizon, but rather, isolated fracture systems within a geologic horizon, exploration of the Cane Creek is particularly challenging. In addition to the physical data derived from drilling, the proposed wells are designed to contribute to the understanding of the influence of tectonic features on the fracture systems and the effectiveness of geophysical data interpretation in predicting fracture system occurrence and orientation. Such information will allow geologists to utilize existing data to more accurately map the target.

While lessees, operators and the BLM had several years to interpret data obtained in the early 1990's and the successful horizontal wells established a production history, we are still unable to define a reasonable scenario for future development to be carried forward in a NEPA document. Based on current information, any RFD or NEPA analysis prepared at this time would be short-sighted. Prior to initiating an amendment to the RMP (including new RFD, NEPA document), it would be beneficial to gather additional geologic data on the limits of the Paradox Fold and Fault Belt or on the existing producing reservoirs. Without additional information on the extent of the producible reservoirs or the parameters of the existing reservoirs; a NEPA analysis at this time would have to be of broad scope, would not be prepared on the actual potential for field developments, and would not have specific locations where wells or fields would be developed.

In summary, (1) the production histories from the horizontal wells do not support the concept that the 5 producing wells in the Big Flat - Bartlett Flat areas of the Kane Springs Unit have entered a stage of field development, and (2) BLM's 1993 assumption that the drilling in the Big Flat - Bartlett Flat areas of the Kane Springs Unit had reached a stage of full field development was not accurate. If BLM initiated the preparation of NEPA documentation, either an EA or EIS, for full field development at this time; there would not be enough geologic data to focus the analysis on site specific areas for full field development, and the analysis would be over a broad area encompassing over half a million acres within the Paradox Fold and Fault Belt of the Grand Resource Area. In order to develop a new RFD to focus the scope of future development, additional geologic information would be required. Based on this information, BLM reconsidered options for approving additional exploratory drilling to help collect geologic data on the extent of the oil and gas reserves within the Paradox Fold and Fault Belt and the parameters of the existing oil reservoirs which may be more isolated than originally assumed.

Following their meeting with BLM in May 1997, Aviara Energy Corporation located three potential well sites within the Kane Creek Unit that could be drilled to provide additional information that would be useful to test geologic theories and to confirm reservoir occurrence or reservoir production parameters. Aviara personnel worked with the BLM to select potential well sites that would reduce new surface disturbances and visual impacts.

On November 21, 1997, Moab District mailed a letter to the operators with pending APDs or lease suspensions within the Paradox Fold and Fault Belt. The letter notified operators that BLM was prepared to examine additional proposals which would help define a reasonable scenario for future development of the Cane Creek play or Paradox Fold and Fault Belt. BLM requested that lessees proposing to conduct operations in the play submit those proposals for evaluation, and the proposals would be evaluated on a case-by-case basis to determine whether the information to be obtained will provide specific information as to the feasibility of developing the Cane Creek as a producing field. The letter requested that proposals be submitted by December 31, 1997.

Aviara, Intrepid Oil and Gas, and Riata Energy, Inc. contacted BLM regarding options for exploratory drilling operations that could provide the types of information requested by BLM. On December 31, 1997, the Moab BLM Office had pending 12 APDs within the Paradox Fold and Fault Belt. BLM screened the 12 pending APDs to determine which of them could be classified as exploratory based on the distance from known production.

Six of the 12 APDs were for wells that could be classified as exploratory:

```
Riata, #5-1 Well, T. 23 S., R. 18 E., section 5;
Riata, #9-1 Well, T. 23 S., R. 18 E., section 9;
Aviara, Kane Springs Unit 7-1 Well, T. 25 S., R. 19 E., section 7;
Aviara, Kane Springs Unit 11-1 Well, T. 26 S., R. 19 E., section 11;
Exxon, Shafer #1 Well, T. 27 S., R. 20 E., section 11; and
Exxon, Hatch Point #1 Well, T. 27 S., R. 21 E., section 33.
```

The other 6 pending APDs were considered developmental in nature due to their proximity to producing wells:

```
S.W. Energy, #9-1 Well, T. 23 S., R. 17 E., section 9;
Coastal, Kane Springs Unit 21-1 Well, T. 25 S., R. 18 E., section 21;
Columbia (Aviara), Kane Springs Unit 36-1 Well, T. 25 S., R. 19 E., section 36;
Columbia (Aviara), Kane Springs Unit 18-1 Well, T. 26 S., R. 20 E., section 18;
Celsius, Largo #1 Well, T. 26 S., R. 20 E., section 15; and
Aviara, Kane Springs Unit 30-1 Well, T. 26 S., R. 20 E., section 30.
```

Although Exxon's Hatch Point #1 Well appeared to be exploratory, the well would be located within 1 mile of two plugged and abandoned wells and two temporarily abandoned wells. Based on the geologic and production information available for the adjacent wells, BLM determined that the Exxon Hatch Point #1 Well would not provide the types of information needed prior to revising the RFD or the RMP and that the APD would not be processed at this time.

The visibility of the proposed Exxon Shafer #1 Well may be screened from Dead Horse Point State Park; however, the well would be within the viewshed of Anticline Overlook. BLM considers the impacts and potential conflicts associated with drilling a well (and potentially developing an oil and gas field) in Shafer Basin as issues better addressed through the RMP. The potential impacts from locating a well anywhere within Shafer Basin would be beyond the scope of this EA, and BLM will postpone the processing of the APD for the Exxon Shafer #1 Well.

During the initial geologic screening of the pending APDs, Aviara's Kane Springs Unit 30-1 Well was considered developmental due to its proximity to a producing well, the Kane Springs Unit 19-1A Well. When originally staked by Aviara, using the existing geophysical data, this well was located in T. 26 S., R. 19 E., section 25 (Oil and Gas Lease UTU-67558), approximately 1/2 mile southwest of the 30-1 Well. Oil and Gas Lease UTU-67558 was issued with an oil and gas leasing stipulation for no surface occupancy in section 25. When reviewing options for horizontally drilling from adjacent locations to hit the target in section 25, Aviara considered two sites for relocating the well. BLM checked both of the options in the field with Aviara, and BLM preferred the location for the 30-1 Well (section 30) over the other option in section 24 which would have been over 1 mile west of the 30-1 Well. BLM considers the proposed location for the 30-1 Well as less of a visual impact than the other option which would be located closer to the road to Canyonlands National Park. As a result of following BLM's recommendation to reduce potential visual impacts, Aviara moved the surface location of the 30-1 Well from an area that would have been exploratory to an old drill site that is closer to a producing well (19-1A Well). The original subsurface target in section 25 was not changed by moving the surface location of the well into section 30. The drilling of the 30-1 would test the validity of geophysical data interpretation which would be used in selecting well locations across the area. This type of information would be useful prior to preparing a new RFD and RMP update, and BLM will analyze the 30-1 Well in this EA.

## **NEED FOR THE PROPOSED ACTION**

Based on the BLM's screening and review of the pending APDs, as specified in the previous section; five APDs were selected for processing in this EA.

Aviara Energy submitted Applications for Permit to Drill (APD) three wells in the Kane Springs Unit, on December 17, 1997:

Kane Springs Federal 7-1 Well, Oil and Gas Lease UTU-51239; Kane Springs Federal 11-1 Well, Oil and Gas lease UTU-65972; and Kane Springs Federal 30-1 Well, Oil and Gas Lease UTU-46697.

On October 24, 1997, Riata submitted an APD for the #9-1 Well, and on November 20, 1997, Riata submitted an APD for the #5-1 Well:

#5-1 Well, Oil and Gas lease UTU-75891; and #9-1 Well, Oil and Gas Lease UTU-75891.

All of the proposed wells would be located on Federal oil and gas leases with Federal surface locations administered by the BLM.

The APD is the mechanism whereby the lessee/operator requests approval to exercise their lease rights to explore for and possibly develop Federal oil and gas resources. The drilling of the proposed wells would determine if oil and gas reserves could be recovered at the proposed locations.

In addition to testing the feasibility of producing oil and gas reserves at the proposed locations, all five of the proposed wells would provide additional geologic and reservoir data. The drilling of the three Aviara wells would provide additional geologic and reservoir data that would help delineate the boundaries of the Paradox Fold and Fault Belt and help define the parameters of the oil and gas reservoirs. The Aviara wells would also test three different geological theories for predicting the location of reservoirs. The #5-1 and #9-1 Wells proposed by Riata would be 4 miles away from the nearest production, and these wells would test a new horizon. The geologic and reservoir information is needed for establishing a new RFD and for determining the boundaries of the productive areas within the Paradox Fold and Fault Belt.

This EA will document the impacts and mitigation for drilling the 5 wells and will update the cumulative impacts of drilling 5 wells within the Paradox Fold and Fault Belt of the Grand Resource Area.

#### CONFORMANCE WITH LAND USE PLAN

This proposed action has been determined to be in conformance with the terms and conditions of the Grand Resource Area Resource Management Plan (RMP), approved July 1985, as required by 43 CFR 1610.5. This is shown on page 15 of the plan and reads as follows: "to keep public lands open for exploration and development of mineral resources while protecting areas with sensitive resource values."

The proposed locations for the two Riata wells, Aviara 7-1 Well, and the Aviara 11-1 Well are in areas with no special oil and gas leasing stipulations identified in the RMP (Category 1 area). The Aviara 30-1 Well would be located in a Category 3 area with oil and gas leasing stipulations for no surface occupancy that were developed in the RMP. However, Oil and Gas Lease UTU-46697 at the proposed location for the 30-1 Well was issued prior to the approval of the RMP; and therefore, Lease UTU-46697 was issued without the no surface occupancy stipulation. Oil and Gas Lease UTU-46697 is held by production, and it is unlikely that a new lease would be issued in the near future.

The Supplemental Program Guidance (SPG) for fluid minerals (1624.22 C.) specify RFDs should be projected as number of wells and fields. The RFD projections are also linked to cumulative impacts, which are generally measured in acreage of surface disturbance for the construction of well sites, roads, and pipelines. The 1988 RMP Oil and Gas Supplemental EA estimated an average well would result in 6.5 acres of surface disturbance. In March of 1993, the average surface disturbance for a well within the Paradox Fold and Fault Belt was approximately 4 acres (EA# UT-068-93-031). The cumulative impacts of the drilling from 1988 through 1993 is less than the 65 acres estimated for 10 wells in the existing RFD for the Paradox Fold and Fault Belt. The 1988 RMP Oil and Gas Supplemental EA assumed that 50 percent of the wells would be productive and 50 percent would be abandoned and reclaimed. The EA also assumed revegetation would be successful within a scope of 10 years. Based on the drilling that has occurred within the Paradox Fold and Fault Belt since 1988, these assumptions from the existing RFD would still be valid.

The Potash-Confluence Habitat Management Plan (HMP) encompasses the areas of the proposed actions. The goals and objectives for the Potash-Confluence HMP have been developed to protect and enhance habitat for desert bighorn sheep, peregrine falcon, riparian habitat, <u>Cycladenia humilis</u> which is an endangered plant, deer, and elk.

All of the proposed wells would be in areas grazed as part of the Big Flat - Ten Mile allotment, and an Allotment Management Plan (AMP) has been developed for the area. The implementation of the AMP would not be affected by the proposed actions as long as the surface impacts from the proposed actions were properly mitigated.

This environmental assessment (EA) tiers to the Environmental Analysis Record for Proposed Oil and Gas Leasing in the Grand Resource Area (1975), the EIS for the Grand Resource Area Management Plan (1983), and the RMP Oil and Gas Supplemental EA UT-060-89-025 (December 14, 1988). EA UT-068-91-079 for the Western Gas Gathering Pipeline, EA UT-068-91-080 for the Chevron Green River Federal #1-20 Exploratory Well, EA UT-068-91-082 for the Columbia Gas Development Corporation Kane Springs Federal #10-1 and #20-1 Exploratory Oil Wells, and UT-068-93-031 for the Kane Springs Federal 25-19-34-1 Well provide additional information on affected environments and potential impacts from similar projects.

## RELATIONSHIP TO STATUTES, REGULATIONS, OR OTHER PLANS

The exploration, development and production of Federal oil and gas leases is regulated by 43 CFR 3160, Onshore Oil and Gas Orders, and Notices to Lessees and operators (NTLs).

The proposed action is consistent with Grand County's 1979 Master Plan for Development.

The proposed action would meet the BLM's policy to manage energy and mineral resources on public lands in accordance with the provisions of the Mining and Minerals Policy Act of 1970 and the Federal Land Policy an Management Act of 1976 (FLPMA). The Mining and Minerals Policy Act of 1970 declares that it is the continuing policy of the Federal government to encourage and facilitate private enterprise in the development of a stable domestic minerals industry and the orderly and economic development of domestic mineral resources. FLMPA reiterates the Nation's need for domestic sources of mineral and other resources and requires that public lands be managed accordingly.

In keeping with these policies, the BLM actively facilitates the development by private industry of public land mineral resources in a manner that satisfies national and local needs and provides for economically and environmentally sound exploration, extraction, and reclamation practices (BLM Manual Section 3000.06).

## PROPOSED ACTION AND ALTERNATIVES

The proposed action would require the construction and maintenance of a well pad to drill, produce and eventually plug/abandon an oil well at each of the proposed locations. The Surface Use Plans submitted with the APDs provide specifications for construction, operation, and restoration of the well sites. The Surface Use Plans were developed during onsite inspections of the proposed well sites. Representatives from the oil companies and BLM participated in the onsite inspections.

The Surface Use Plans for the Aviara wells and the Riata wells are substantially different from each other. Therefore, the information for the proposed action was separated into two headings; Aviara Wells and Riata Wells. Maps of the proposed wells and access routes are attached in Appendix A.

## **Aviara Wells**

Kane Springs Federal 7-1 Well, T. 25 S., R. 19 E., section 7; Kane Springs Federal 11-1 Well, T. 26 S., R. 19 E., section 11; and Kane Springs Federal 30-1 Well, T. 26 S., R. 20 E., section 30.

Approximately 1.3 miles of an existing two-track road would be upgraded and 0.6 mile of new road would be constructed between the Spring Canyon road (Grand County Road #140) and the proposed location for the Kane Springs Unit 7-1 Well. The 11-1 Well would be located approximately 300 feet from State Route 313, and the proposed access would be constructed on a previous surface disturbance. The access for the 30-1 Well would follow 0.3 miles of the road to the 19-1A Well, and 0.7 miles of an existing two-track road would be upgraded. The existing roads and new roads would be flatbladed for the drilling operations. If a well was completed for production, the roads would require a road width of 35 feet to include the travel surface of 21 feet wide, ditches and topsoil berms.

The construction of a drilling location and well site would involve a surface disturbance of approximately 400 feet by 400 feet. The top 6 inches of soil would be removed and stockpiled. A lined reserve pit would be constructed within the surface disturbance of the proposed well site. Based on previous construction at Columbia wells, it is anticipated that the construction of a well pad could entail some blasting of rock.

The construction of a well site would require about 10 days, and the drilling operations would take approximately 50 days. Well testing and completion activities could take another 20-30 days.

Approximately 48 truckloads of equipment would be required to transport the drilling rig to the location. During the drilling phase, the use of 10-15 vehicles per day would be anticipated. Trucks hauling water for drilling would also be on the highway. One or two vehicles would travel to the well each day during production to inspect and maintain equipment. Depending on oil production and facilities constructed for production handling, one tanker truck would transport oil every 1-2 weeks.

Initially, drilling of the well would utilize an air drilling system, with cuttings contained in a blooie pit. The blooie line would be misted to control dust. An oil-base drilling mud would be used to finish the drilling. Oil-based muds have been the most successful when drilling horizontal wells, and any alternative muds would need to meet very specific parameters for the anticipated drilling conditions. All fluids used during the drilling or testing of the well would be contained in a fenced reserve pit. The reserve pit would be fenced on three sides during drilling operations and the fourth side would be fenced when the rig moves off the location. After the fluids have been removed or evaporated, the reserve pit contents would be stabilized, covered with the subsoil stockpiled during construction of the pit, and reclaimed. Sewage would be contained in a chemical toilet during the drilling operations. Trash would be stored in a portable self-contained trash cage and hauled to an approved sanitary landfill when the drilling is completed.

If commercial production is established, the production facilities would probably be located on the well pad. An area of approximately 400 feet by 300 feet (2.75 acres) would be needed for production operations. The majority of this area would be occupied by production facilities. It is anticipated that a wireline truck would be on location every 2-3 weeks to remove paraffin from the well. The entire well pad would be required during future down-hole maintenance operations.

It may be feasible to pipe production from the 30-1 Well to the 19-1A Well. In the event that oil can be piped to the 19-1A battery, there may be an opportunity to utilize some of the existing production facilities at the 19-1A Well and to eliminate some of the production facilities that would be located at the 30-1 Well.

The specific design and layout of a production facility would be based on the volume of production during the well tests, cut and fill logistics at the well site, and potential visual impacts from the equipment. The anticipated production facilities would include a tank battery, heater treater, separator, circulation pump and flare pit. A typical tank battery would include 3-4 tanks (500 barrel capacity per tank) to contain oil and an additional tank for produced water. The tank battery and production equipment would be surrounded by a berm adequate to contain any fluids lost during production handling or discharged in the event of a spill. The well pad (or certain portions of the tank battery, treater, and flare pit) would probably be fenced to exclude livestock. It is anticipated that a pumping unit would be needed to produce the well after 2 years of production. Internal combustion engines associated with production facilities would be equipped with noise reducing mufflers. All permanent production facilities would be painted a neutral nonreflective color. If the well is a producer, additional upgrading and maintenance would be needed for drainage control on the new road. Unless pipelines were constructed to this area, oil production would be hauled from the well site by tanker trucks and gas would be flared pursuant to the guidelines in NTL-4A. Any salt water produced at the well would be hauled to an approved disposal site unless alternate disposal methods were authorized according to Onshore Oil and Gas Order 7.

If the well is not developed into a producing well or when it is no longer commercially productive, the well would be plugged. Gravel would be removed from the areas requiring reclamation. The well pad and access road would be recontoured, topsoil replaced, scarified, and seeded as specified by BLM.

## Riata Wells

#5-1 Well, T. 23 S., R. 18 E., section 5; and #9-1 Well, T. 23 S., R. 18 E., section 9.

The #9-1 Well would be located approximately 300 feet from a Grand County Road #138, between the Ruby Ranch Road and the Moab Airport. The access for the #5-1 Well would follow an existing road that would be upgraded for approximately 1.8 miles, and approximately 0.3 miles of new road would be constructed to reach the well site for the #5-1 Well. The existing roads and new roads would be flatbladed for the drilling operations. If a well was completed for production, the roads would require a road width of 35 feet to include the travel surface of 18-20 feet wide, ditches and topsoil berms.

The construction of a drilling location and well site would involve a surface disturbance of approximately 300 feet by 175 feet. The top 6 inches of soil would be removed and stockpiled. A reserve pit of 40 feet by 20 feet would be constructed adjacent to the proposed well site.

The construction of a well site would require 2-5 days, and the drilling operations would take 5-10 20 days. Well testing and completion activities could take another 20-30 days.

During the drilling phase, there would be 3-5 vehicles driving to the well site each day. Trucks hauling water for drilling would also be using the Grand County roads. One or two vehicles would travel to the well each day during production to inspect and maintain equipment. Depending on oil production and facilities constructed for production handling, one tanker truck would transport oil every 1-2 weeks.

The Riata wells would be vertical wells; and the drilling operations would utilize an air drilling system. The blooie line would be misted with water to control dust, and cuttings would be contained in a pit. All fluids used during the drilling or testing of the well would be contained in a fenced reserve pit. The reserve pit would be fenced on three sides during drilling operations and the fourth side would be fenced when the rig moves off the location. After the fluids have been removed or evaporated, the reserve pit contents would be covered with the subsoil stockpiled during construction of the pit, and reclaimed. Sewage would be contained in a chemical toilet during the drilling operations. Trash would be stored in a portable self-contained trash cage and hauled to an approved sanitary landfill when the drilling is completed.

If commercial production is established, the production facilities would probably be located on the well pad. An area of approximately 300 feet by 160 feet (1.1 acres) would be needed for production operations. The majority of this area would be occupied by production facilities. It is anticipated that a wireline truck would be needed periodically to remove paraffin from the well. The entire well pad may be required during future down-hole maintenance operations.

As indicated in the previous section for the Aviara wells, the specific design and layout of a production facility would be based on the volume of production during the well tests, cut and fill logistics at the well site, and potential visual impacts from the equipment. The anticipated production facilities would probably include a tank battery, heater treater, separator, circulation pump and flare pit. A typical tank battery would include 2-3 tanks (200-500 barrel capacity per tank) to contain oil and an additional tank for produced water. The tank battery and production equipment would be surrounded by a berm adequate to contain any fluids lost during production handling or discharged in the event of a spill. It is anticipated that a pumping unit would be needed to produce the well after 2 years of production. All permanent production facilities would be painted a neutral non-reflective color. If the well is a producer, additional upgrading and maintenance would be needed for drainage control on the new road. Oil production would be hauled from the well site by tanker trucks and gas would be flared pursuant to the guidelines in NTL-4A. Any salt water produced at the well would be hauled to an approved disposal site unless alternate disposal methods were authorized according to Onshore Oil and Gas Order 7.

If the well is not developed into a producing well or when it is no longer commercially productive, the well would be plugged. Gravel would be removed from the areas requiring reclamation. The well pad and access road would be recontoured, topsoil replaced, scarified, and seeded as specified by BLM.

In addition to the Surface Use Plan, the APD includes a Drilling Program that provides specifications and mitigation for drilling through potential water and hydrocarbon zones, casing and cementing programs, pressure control equipment, drilling fluid programs, and well evaluation programs. The proposed Aviara wells would be drilled and completed as horizontal wells. The Riata wells would be drilled as vertical wells. The drilling information would be reviewed by a Geologist and Petroleum Engineer in the Moab District Office prior to the approval of the APD. The Moab District Engineer would also provide specifications for plugging the wells.

#### **NO ACTION ALTERNATIVE**

Under the no action alternative, an APD would not be approved for the proposed location. The existing environment would remain in its current condition, and there would be no new environmental consequences as a result of this alternative.

The lessee has the legal right to explore and develop oil and gas resources underlying the lease. Therefore, denying all efforts to exercise these lease rights is not a viable alternative. Selection of the no action alternative would likely result in the applicant submitting a new APD with a new surface location. This would be treated as a new proposed action requiring additional analysis.

#### ISSUE IDENTIFICATION AND ASSUMPTIONS

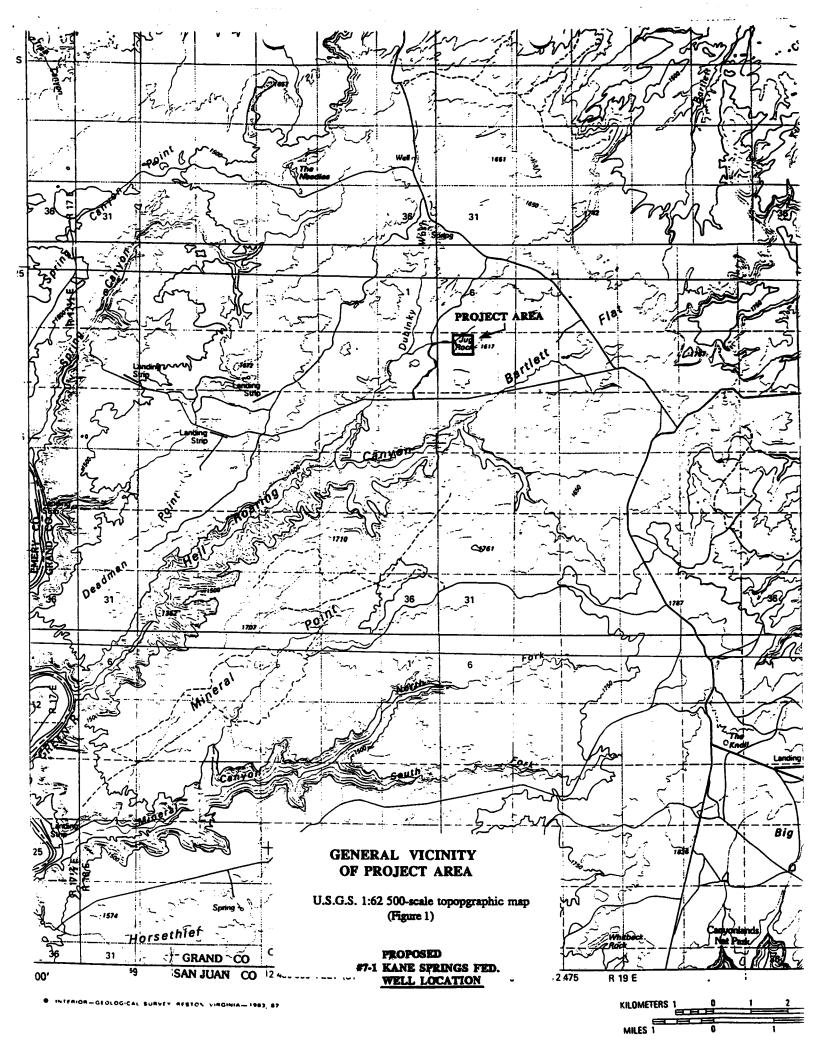
Based on previous public reviews and public comments received on wells in the Kane Springs Unit, BLM anticipates the majority of the issues for the Kane Springs wells will be related to visual or recreational valves. Personnel from Aviara Energy located the Kane Springs 11-1 and 30-1 Wells on old, reclaimed drilling locations to minimize new surface disturbances. BLM personnel checked proposed well sites with Aviara and discussed potential modifications for reducing impacts to visual resources.

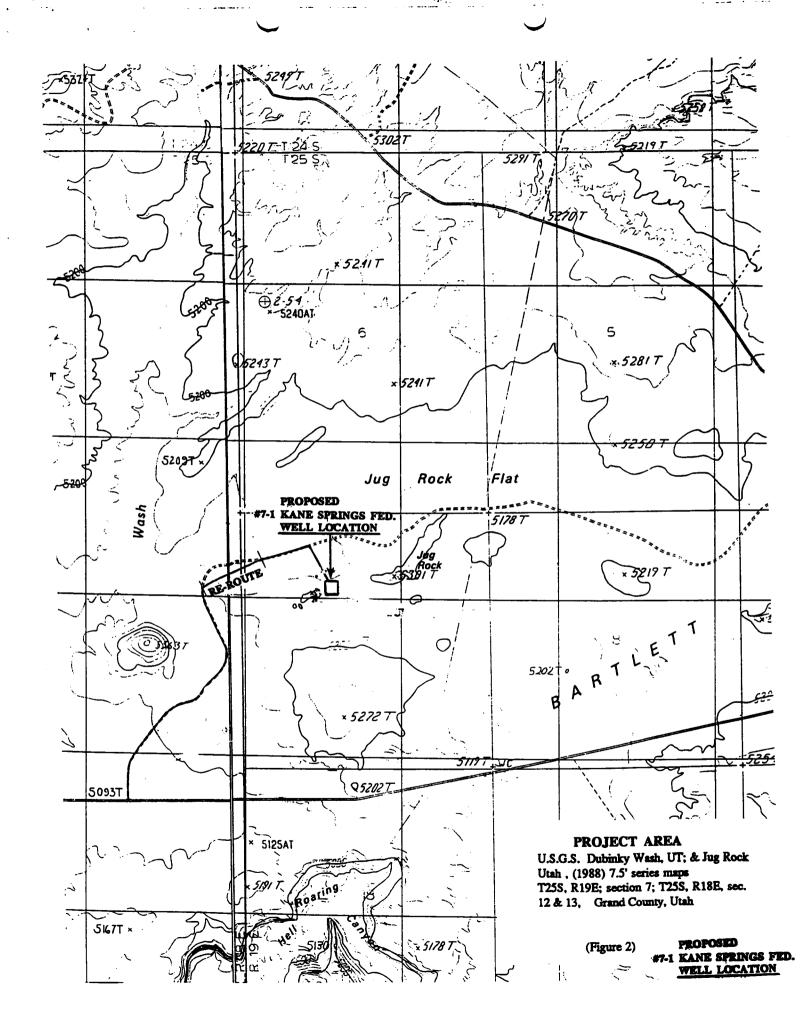
The Reader can assume that potential impacts to threatened and endangered (T&E) species and cultural resources from the proposed action would be analyzed in the EA and mitigation would be consistent with the Federal laws and regulations. This information would be documented in the EA.

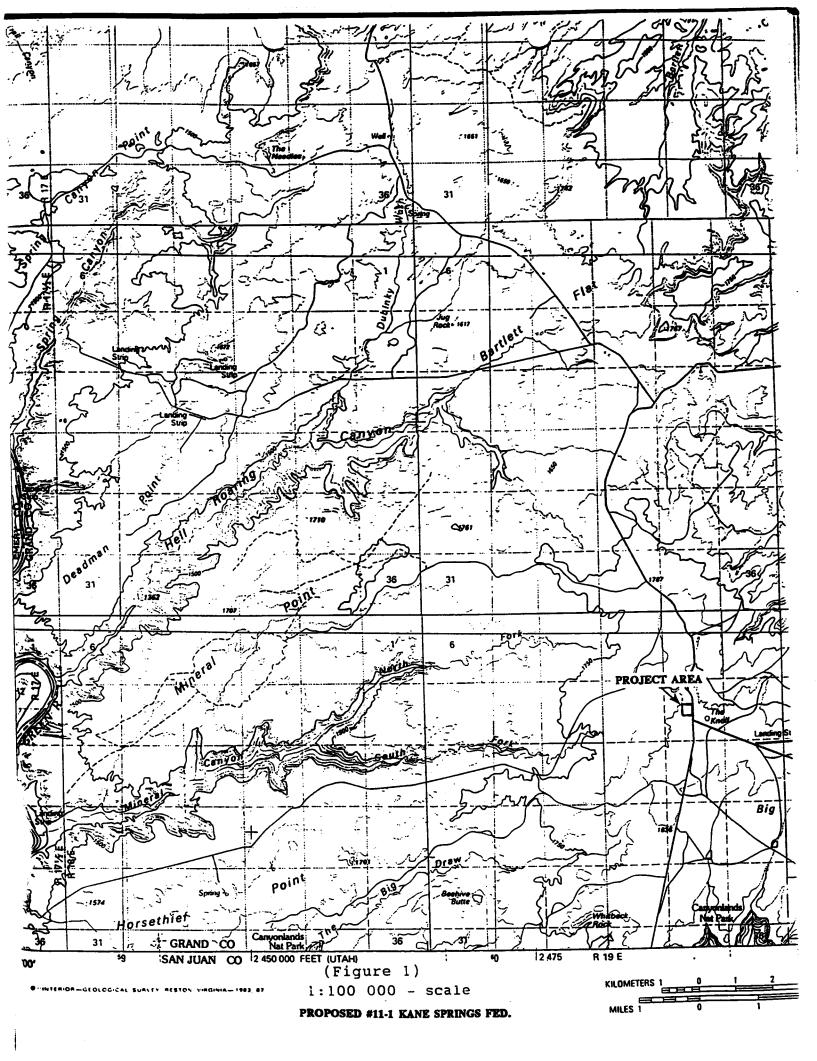
The EA would document the affected environment and environmental impacts to each affected resource. At this time, it is anticipated that the EA would have specific sections for Vegetation and Soil, Recreation, Visual Resources, Air Quality and Noise, Livestock Grazing, Wildlife/T&E Species, and Cultural Resources. Under the analysis for each resource, there would be headings for Affected Environment, Impacts, Mitigation, and Residual Impacts for the Proposed Action and No Action Alternatives. The cumulative impacts would be covered in a separate section of the EA and would address all affected resources.

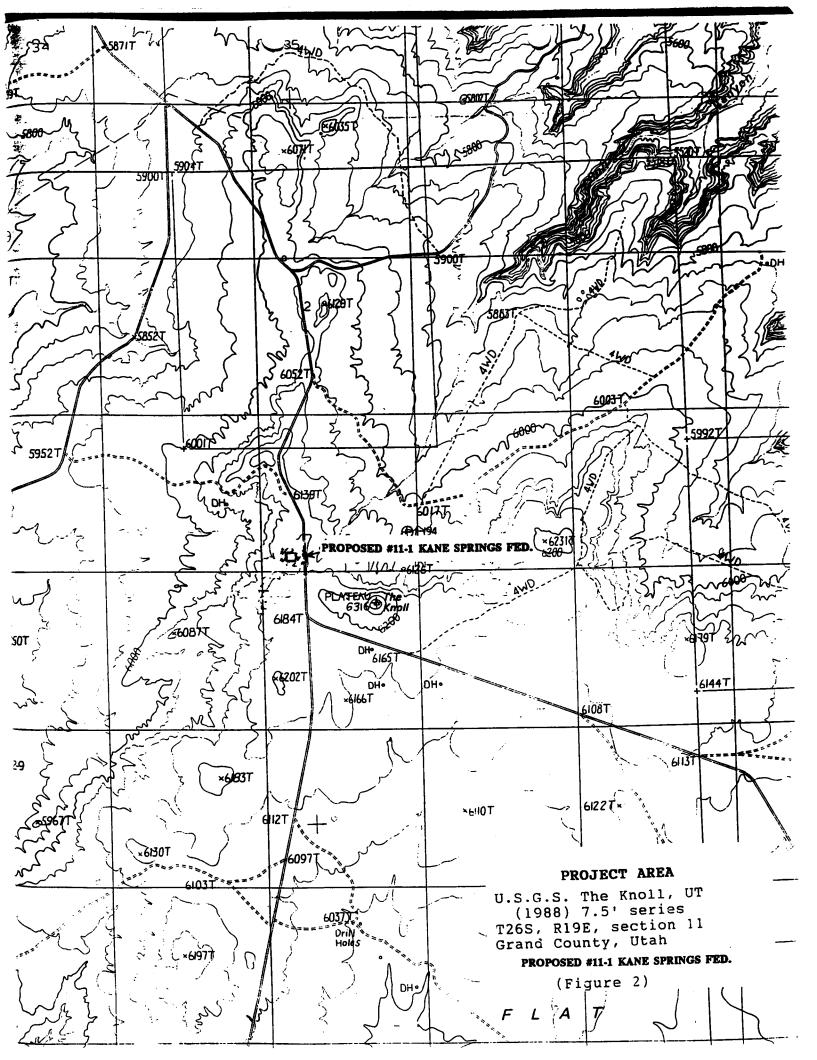
#### <u>Appendix</u>

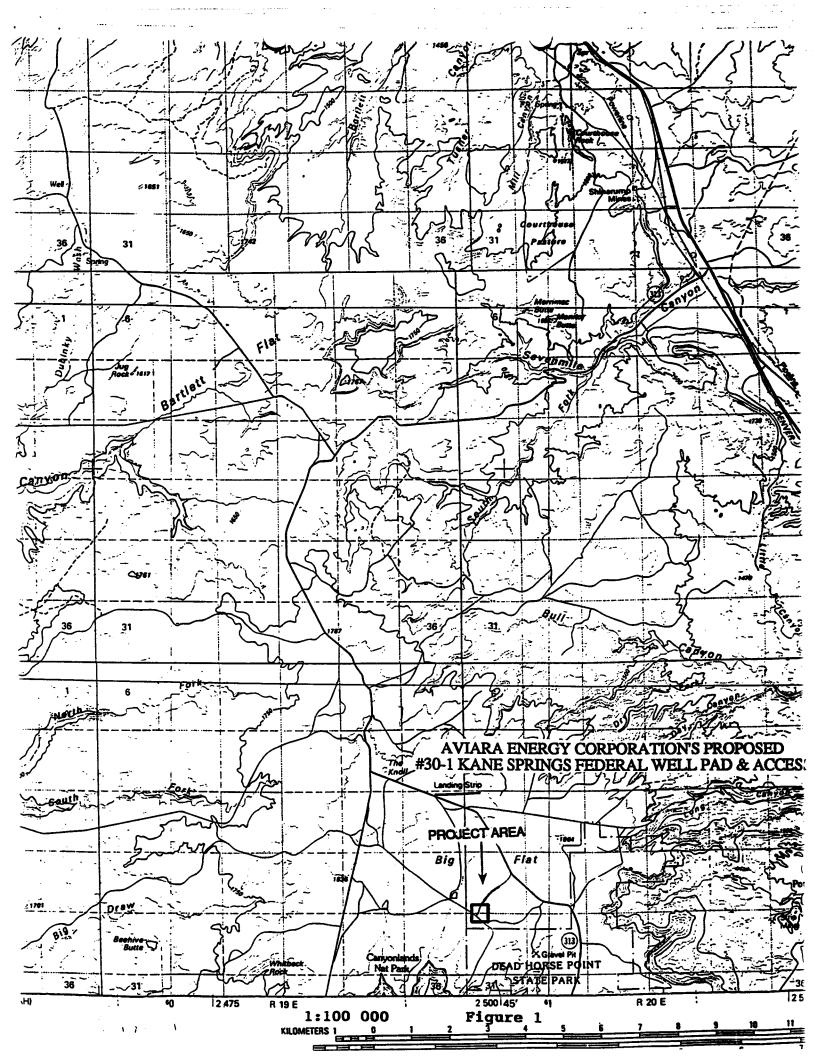
Appendix A - Two Maps for Each Proposed Well

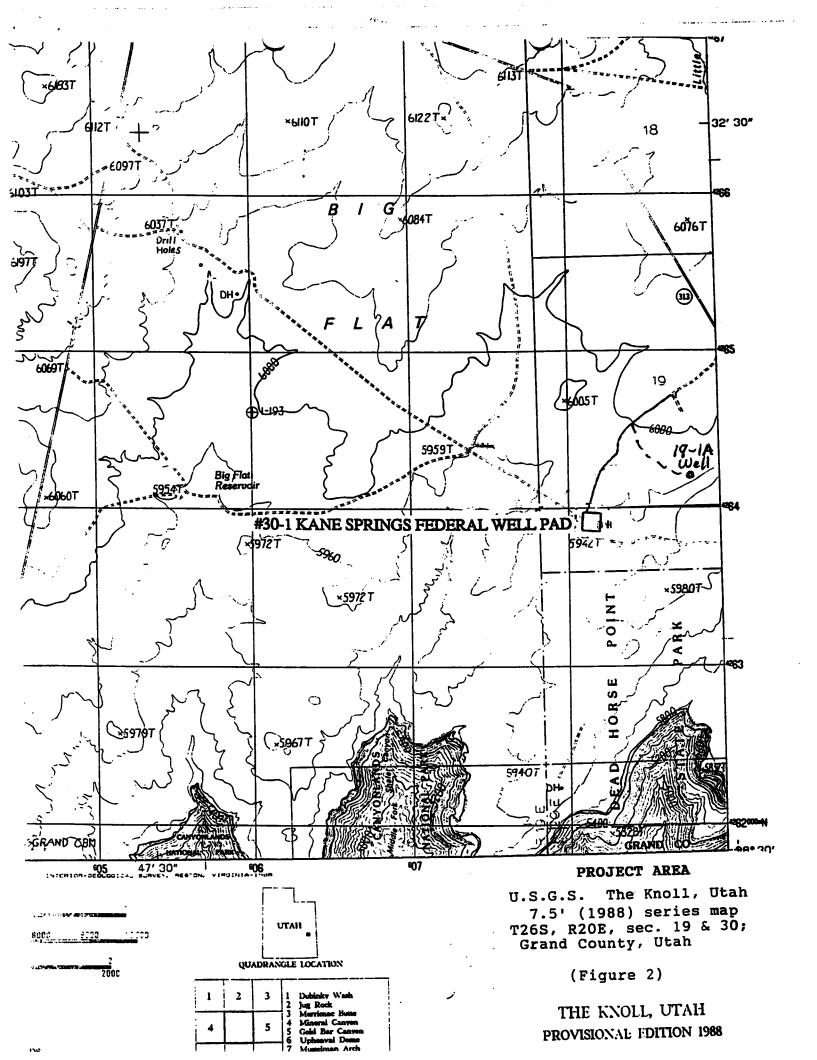


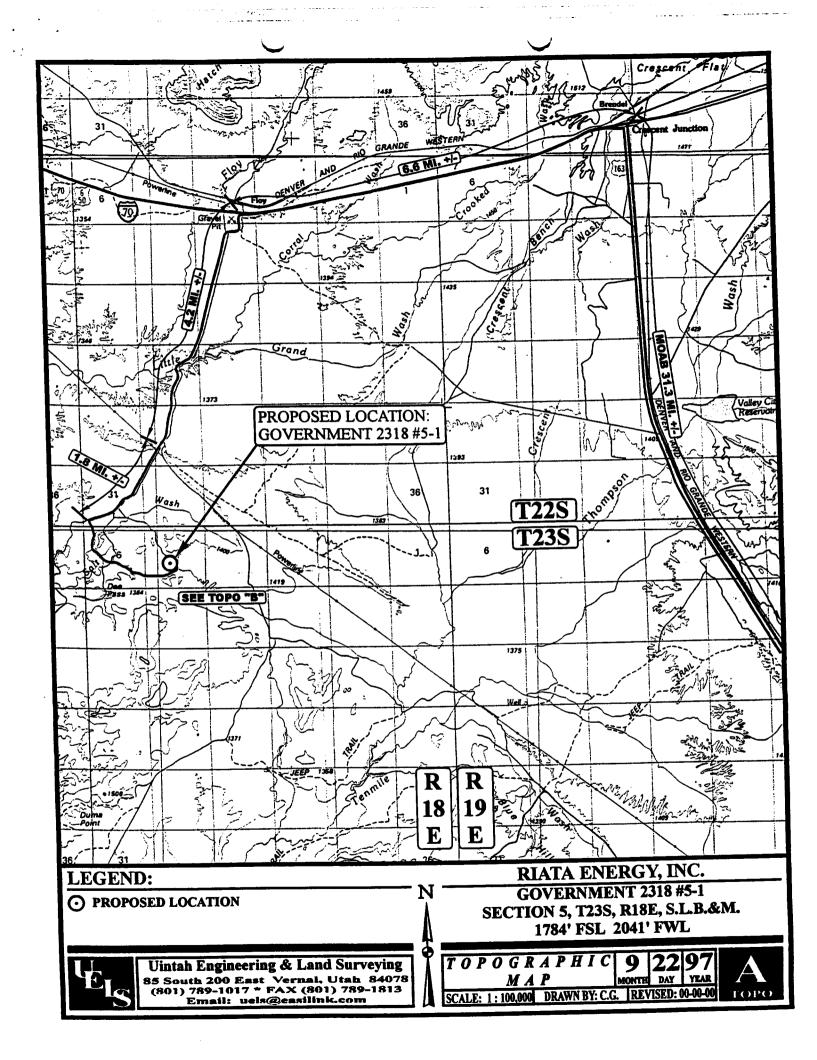


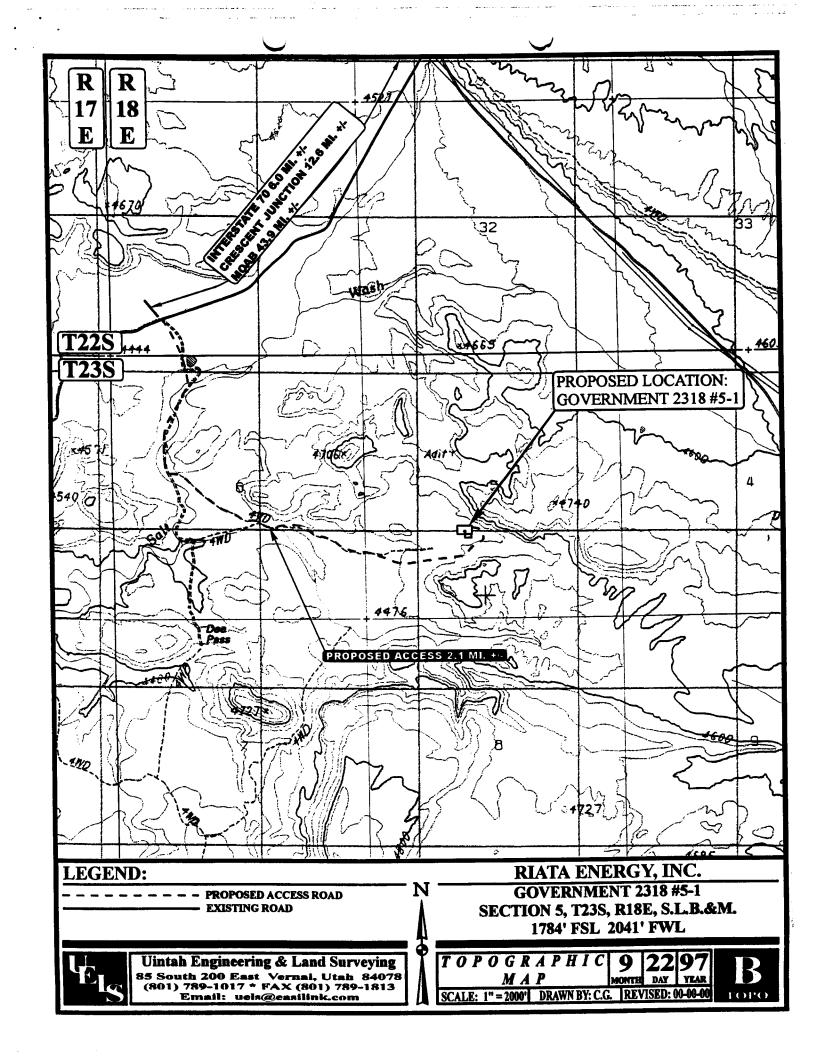


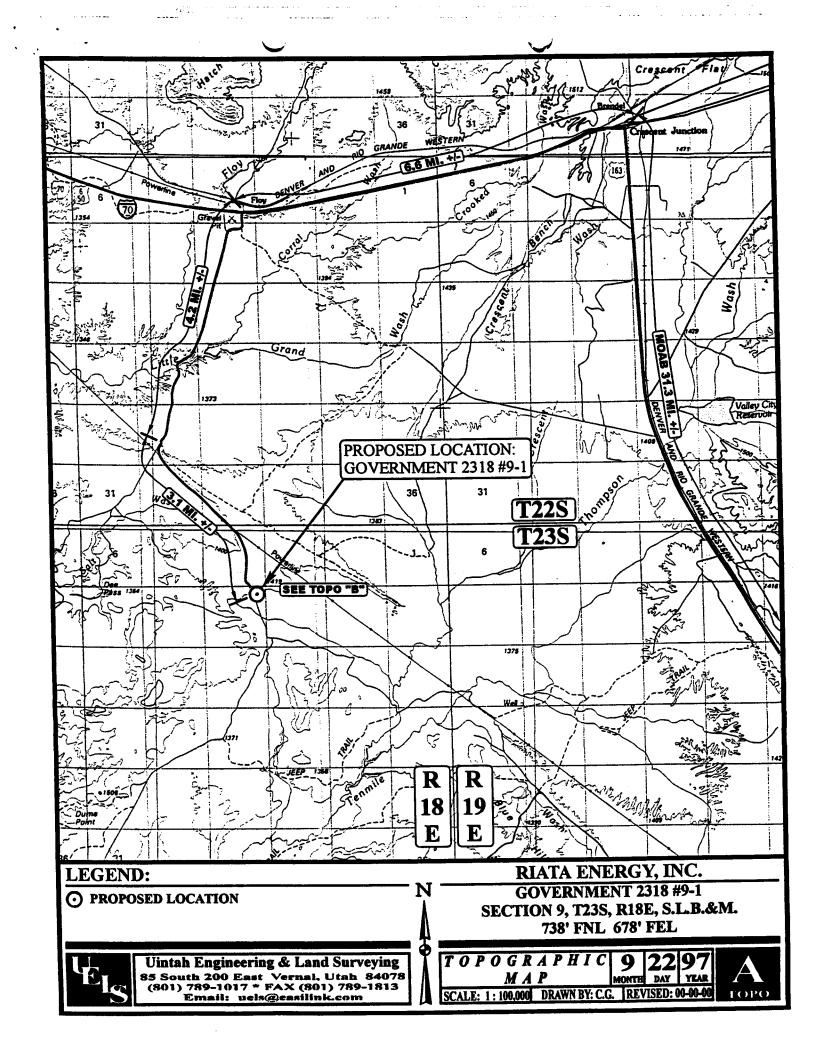


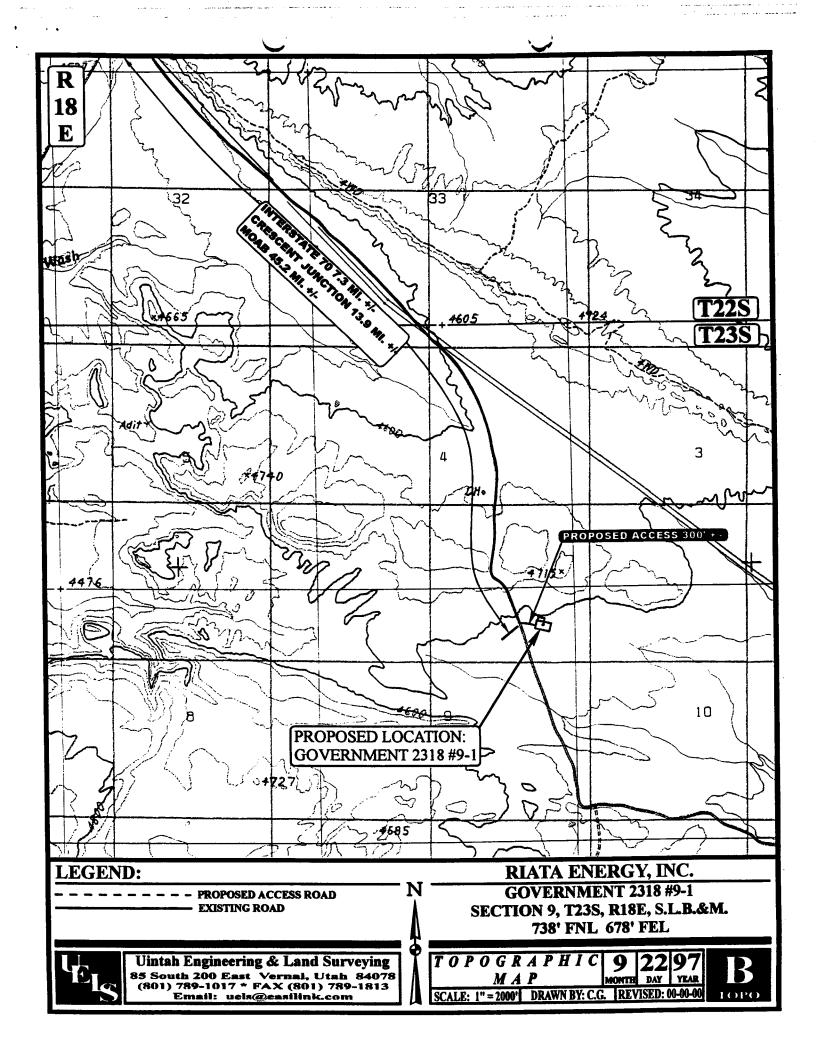












. APPROVED BY \_

CONDITIONS OF APPROVAL, IF ANY:

## SUBMIT IN TI \_\_ICATE\*

Form approved.

Form 3160-3 (November 1983)	UNIT	ED STATES	(Other instr reverse		Budget Bureau No. 1004-0136 Expires August 31, 1985
(formerly \$-331C)	DEPARTMENT	OF THE INTER			5. LEASE DESIGNATION AND SERIAL NO. UTU-65972
	_ <del></del>	LAND MANAGEMEN		D.A.CI/	6. IF INDIAN, ALLOTTED OR TRIBE NAME
APPLICATIO	N FOR PERMIT T	O DRILL, DEEP	EN, OR PLUG	RACK	•
1a. TIPE OF WORK		DEEPEN 🗆	PLUG BA	ACK 🗆	7. UNIT AGREEMENT NAME
b. TIPE OF WELL			INGLE MULT		Kane Springs Federal Unit
OIL VY 2	WELL OTHER				Kane Springs
Aviara Energy	Corporation	·			9. WELL NO.
3. ADDRESS OF OPERATOR		V 77251 1250			NO. 1:1-1 10. FIELD AND FOOL, OR WILDCAT
P. O. BOX 1	350. Houston, T	X 77251-1350 in accordance with any	Btate requirements.*)		Wildcat
4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	& 2060' FWL Sec.				11. SBC., T., E., M., OR BLK. AND SURVEY OR AREA
At proposed prod. so	% 800' FWL Sec.	11. T26S. R19			Sec. 11, T26S, R19E
800 FNL	AND DIRECTION FROM NEAR	BET TOWN OR POST OFFI		•	12. COUNTY OR PARISH 18. STATE
15 miles	west of Moab, UT	T	O. OF ACRES IN LEASE	1 17 80	Grand Co. UT
10. DISTANCE FROM PROF LOCATION TO NEARES PROPERTY OR LEASE (Also to peacest dr)	USED Surf(LS)2219 LINE, FT. BHL(LS)800' lg. unit line, if any	FNL Sec 11 2	o <sup>i</sup> 37.50	. 70	560
	DRILLING, COMPLETED,	IA 1	7850' TVD		ARY OR CABLE TOOLS Rotary
21. ELEVATIONS (Show will 6146 GR	hether DF, RT, GR, etc.)			•	May, 1998
23.	P	ROPOSED CASING AN	D CEMENTING PROG	RAM	
SIZE OF ROLE	SIZE OF CASING	WEIGHT PER POOT	BETTING DEPTH		QUANTITY OF CEMENT
	,				
•	• •				
•			•	ľλ	)]E(CIE][(VIE)[\]
			•	V	
SEE ATTACH	•			. [][]	JUN 05 1998
This well	is a Horizontal	Test of the .Ca	ne Creek Forma	1	OF OIL, GAS & MINING
			•	-	
			•	•	
				•	Option and an arrangement of the second
	-	••		•	THE VENTING OF
•			•		TO NITL 4-A
	en e	in New York (1996) P	• • •	•	
IN ABOVE SPACE DESCRIPTIONS. If proposal is to preventer program, if a	drill or deepen directions	proposal is to deepen or illy, give pertinent data	on subsurface locations	s and measu	oductive sone and proposed new productive red and true vertical depths. Give blowout
24.	/// // Barre	anto y	or: Envir Sá	faty l I	Reg. DATE 16 December 199
BIGHED JUNION	of of range	TITLE	<u> </u>		TOWN DATE OF TOWNS
(This space for bed	deral or State office use)	//			•
PERMIT NO.	<del></del>	. A	APPROVAL DATE	<u> </u>	JUN 2 1998
·	/s/. Brad D. Palm	er - ASSI	stant Field M	anager,	,

### Aviara Energy Corporation

April 7, 1999

CONFIDENTIAL

Bureau of Land Management Attn: Eric Jones 82 E. Dogwood Moab, UT 84532

State of Utah
Division of Oil, Gas, & Mining
Attn: John Baza
1594 West North Temple, Suite 1210
Salt Lake City, UT 84114

Reference: Aviara Energy Corporation

Kane Springs #7-1
Kane Springs #30-1
Grand County, Utah

#### Gentlemen:

Enclosed please find "Sundry Notices and Reports on Wells" requesting a one year extension of the approved "Application For Permit To Drill, Deepen, or Plug Back" for the above referenced wells.

Please contact me at 713-871-3400 should you have any questions or require additional information. Thank you for your assistance.

Very truly yours,

**AVIARA ENERGY CORPORATION** 

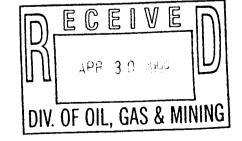
Victoria Guidry

Production/Regulatory Coordinator

/vjg

**Enclosures** 

docs\reg\050



## TED STATES DEPARTMENT OF THE INTERIOR

FΟ	RM	Α	PP	RC	١V	EΓ
	~~.	_		•	, ,	

Budget Bureau No. 1004-0135

Expires	Luly	31	1006	
	****	,	1770	_

BUREAU OF I	LAND MANAGEN	MENT		5. Lease Ser	rial No.
SUNDRY NOTICES	AND REPORTS	ON WELLS		UTU-6597	<b>'</b> 2
Do not use this form for abandoned well. Use For	proposals to drill or m 3160-3 (APD) fo	to re-enter an r such proposals.			Allottee or Tribe Name
SUBMIT IN TRIPLICATE -	- Other instructions	on reverse side			CA/Agreement, Name and/or No ings Federal Unit
1. Type of Well    X Oil   Gas   Other   2. Name of Operator		CONFIDENT	M	8. Well Name Kane Spr	o and No. Ings 11-1
Aviara Energy Corporation			71 VI.	9. API Well I	No.
3a. Address		3b. Phone No. (include area	code)	43-019-3	
P.O. Box 1350, Houston TX 77251-13 4. Location of Well (Footage, Sec., T., R., M., or Survey Description)		713-871-3400			Pool, or Exploratory Area
2220' FNL & 2060' FWL, SE NW Sec. 11, T26S, R19E	puon			Wildcat 11. County o	or Parish, State
	- N			Grand Co	ounty. UT
12. CHECK APPROPRI	ATE BOX(ES) TO I	IDICATE NATURE OF NO	TICE, REPORT,	OR OTHER D	ATA
TYPE OF SUBMISSION		TYF	E OF ACTION		
X Notice of Intent	Acidize	Deepen	Production	(Start/Resume)	Water Shut-Off
Subsequent Report	Alter Casing	Fracture Treat	Reclamation	3	Well Integrity
Canadania Report	Casing Repair	New Construction	Recomplete	,	X Other Request fo
Final Abandonment Notice	Change Plans	Plug and Ahandon	Temporarily	y Abandon	Extension of
<del></del>	Convert to Injecti	on Plug Back	Water Dispo	osal	Approved APD
Aviara Energy Corporation reapproved "Application For Pe Aviara is currently evaluating approved by Utah Division Oil, Gas and Marks: \$1399	ermit to Drill'ing the drilling  the mofiling	for the above refe	renced well.		IVED
	) 		DIV. OI	OIL, GA	S & MINING
14. I hereby certify that the foregoing is true and correct Name (Printed/Typed)  Victoria Guidry	và Luidn	Title Produc	ction/Regula	tory Coord	dinator
		Date 4/7/9	9	<del></del>	
THIS	SPACE FOR FED	ERAL OR STATE OFF	ICE USE		
Approved by		Title		D	ate
Conditions of approval, if any, are attached. Approval of certify that the applicant holds legal or equitable title to which would entitle the applicant to conduct operations thereon.	those rights in the subj	arrant or Office ect lease		I	

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

## TED STATES DEPARTMENT OF THE INTERIOR

FΟ	RM	Α	PP	RC	١V	EΓ
	~~.	_		•	, ,	

Budget Bureau No. 1004-0135

Expires	Luly	31	1006	
	****	,	1770	_

BUREAU OF I	LAND MANAGEN	MENT		5. Lease Ser	rial No.
SUNDRY NOTICES	AND REPORTS	ON WELLS		UTU-6597	<b>'</b> 2
Do not use this form for abandoned well. Use For	proposals to drill or m 3160-3 (APD) fo	to re-enter an r such proposals.			Allottee or Tribe Name
SUBMIT IN TRIPLICATE -	- Other instructions	on reverse side			CA/Agreement, Name and/or No ings Federal Unit
1. Type of Well    X Oil   Gas   Other   2. Name of Operator		CONFIDENT	M	8. Well Name Kane Spr	o and No. Ings 11-1
Aviara Energy Corporation			71 VI.	9. API Well I	No.
3a. Address		3b. Phone No. (include area	code)	43-019-3	
P.O. Box 1350, Houston TX 77251-13 4. Location of Well (Footage, Sec., T., R., M., or Survey Description)		713-871-3400			Pool, or Exploratory Area
2220' FNL & 2060' FWL, SE NW Sec. 11, T26S, R19E	puon			Wildcat 11. County o	or Parish, State
	- N			Grand Co	ounty. UT
12. CHECK APPROPRI	ATE BOX(ES) TO I	IDICATE NATURE OF NO	TICE, REPORT,	OR OTHER D	ATA
TYPE OF SUBMISSION		TYF	E OF ACTION		
X Notice of Intent	Acidize	Deepen	Production	(Start/Resume)	Water Shut-Off
Subsequent Report	Alter Casing	Fracture Treat	Reclamation	3	Well Integrity
Canadania Report	Casing Repair	New Construction	Recomplete	,	X Other Request fo
Final Abandonment Notice	Change Plans	Plug and Ahandon	Temporarily	y Abandon	Extension of
<del></del>	Convert to Injecti	on Plug Back	Water Dispo	osal	Approved APD
Aviara Energy Corporation reapproved "Application For Pe Aviara is currently evaluating approved by Utah Division Oil, Gas and Marks: \$1399	ermit to Drill'ing the drilling  the mofiling	for the above refe	renced well.		IVED
	) 		DIV. OI	OIL, GA	S & MINING
14. I hereby certify that the foregoing is true and correct Name (Printed/Typed)  Victoria Guidry	và Luidn	Title Produc	ction/Regula	tory Coord	dinator
		Date 4/7/9	9	<del></del>	
THIS	SPACE FOR FED	ERAL OR STATE OFF	ICE USE		
Approved by		Title		D	ate
Conditions of approval, if any, are attached. Approval of certify that the applicant holds legal or equitable title to which would entitle the applicant to conduct operations thereon.	those rights in the subj	arrant or Office ect lease		I	

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

im 3160-5 ovember 1994)

# U\_\_ED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

#### SUNDRY NOTICES AND REPORTS ON WELLS

FC	)KM	APP	ROV	ED	
Budget	Bure	au N	o. 1	004-01	3

Expires July 31, 1996

5. Lease Serial No.

m	c	c	a	7	2

Do not use this form for abandoned well. Use For	r proposals to drill or to re-enter an m 3160-3 (APD) for such proposals.	6. If Indian, Allottee or Tribe Name
SUBMIT IN TRIPLICATE	- Other instructions on reverse side	7. If Unit or CA/Agreement, Name and/or N Kane Springs Federal Unit
1. Type of Well  X Oil Gas Well Other  2. Name of Operator  Aviara Energy Corporation	CONFIDENTIAL	8. Well Name and No. Kane Springs 11-1
3a. Address  P.O. Box 1350, Houston TX 77251-1;  4. Location of Well (Footage, Sec., T., R., M., or Survey Descrit 2220' FNL & 2060' FWL, SE NW Sec. 11, T26S, R19E		10. Field and Pool, or Exploratory Area Wildcat  11. County or Parish, State
12. CHECK APPROPRI	IATE BOX(ES) TO INDICATE NATURE OF NOTI	Grand County, UT CE, REPORT, OR OTHER DATA
TYPE OF SUBMISSION		OF ACTION
Attach the Bond under which the work will be perfollowing completion of the involved operations. If testing has been completed. Final Abandonment No determined that the final site is ready for final inspection  Aviara Energy Corporation re approved "Application For Pe  This well was not drilled in of the year as well as re-ev Evaluation of the drilling p	formed or provide the Bond No. on file with BLM/BLA the operation results in a multiple completion or recomp otices shall be filed only after all requirements, includi asspectfully requests a one year exte ermit to Drill* for the above refere a 1999 partially due to poor oil privaluation of new seismic and rock men program for the next year is current lanned to begin toward the end of the	ces for most chanics data.
4. I hereby certify that the foregoing is true and correct Name (Printed/Typed)  Victoria Guidry  Victoria	Date 4/3/00	on/Regulatory Coordinator
	SPACE FOR FEDERAL OR STATE OFFIC	
Approved by	Title	Date
Conditions of approval, if any, are attached. Approval of ertify that the applicant holds legal or equitable title to t which would entitle the applicant to conduct operations thereon.	this notice does not warrant or those rights in the subject lease	

### Aviara Energy Corporation

April 7, 2000

State of Utah Division of Oil, Gas. & Mining Attn: Lisha Cordova 1594 West North Temple, Suite 1210 Salt Lake City, UT 84114

Reference:

Kane Springs #11-1 Sec. 11, 265, 19E CONFIDENTIAL
API Well No. 43-010 2400

Grand County, Utah

Dear Ms. Cordova:

Please include this letter as an attachment to the Sundry Notice submitted on March 3, 2000 which requests a one year extension of the approved "Application For Permit to Drill" for the above referenced well.

R649-3-2 (#3) of The Oil and Gas Conservation General Rules of the Utah Division of Oil, Gas and Mining states that:

"In the absence of special orders of the Board, no portion of the horizontal interval within the potentially productive formation shall be closer than six hundred-sixty (660) feet to a drilling or spacing unit boundary, federally unitized area boundary, uncommitted tract within a unit, or boundary line of a lease not committed to the drilling of such horizontal well."

This letter serves as notice that the Kane Springs #11-1 location complies with this rule.

Please contact me at 713-871-3400 should you have any questions or require additional information. Thank you for your assistance with this matter.

Very truly yours,

AVIARA ENERGY CORPORATION

Donny W. Worthington

Manager; Environmental, Safety And Regulatory Affairs

DW/VG/vjg

docs\reg\050b

RECEIVED APRIL ~ 2000 OIL, GAS AND MINING

## **MITED STATES**

CONF	FORM APPRO	IAL OVED
_		1004 010

(November 1994)		IT OF THE INTER LAND MANAGEM	=		Expires	3 July 31, 1996
					5. Lease Serial I	No.
	SUNDRY NOTICES				UTU-65972 6. If Indian, Alle	ottee or Tribe Name
	Do not use this form for abandoned well. Use Form			:	·	
	SUBMIT IN TRIPLICATE -	Other instructions	on reverse side		1	/Agreement, Name and/or No.
1. Type of Well  X Oil Well	Gas Other				8. Well Name an	
2. Name of Operator	rgy Corporation					
3a. Address	rgy corporation		3b. Phone No. (include area	code)	9. API Well No.	
	350. Houston TX 77251-13	350	713-871-3400	,	43-019-313	ool, or Exploratory Area
4. Location of Well (	Footage, Sec., T., R., M., or Survey Descri				Wildcat	oi, or Exploratory ratio
•	L & 2060' FWL, SE NW				-	
Sec. 11,	T26S, R19E BHL Nu	NW 800 FAL	800 FWL		11. County or P	•
	12 CUECK ADDRODD	ATE BOY(ES) TO IN	DICATE NATURE OF NO	TICE DEDORT	Grand Cour	
				-	OR OTHER DAT	1A
TYF	PE OF SUBMISSION		TYF	PE OF ACTION		
<b>X</b> 1	Notice of Intent	Acidize	Deepen	Production	(Start/Resume)	Water Shut-Off
		Alter Casing	Fracture Treat	Reclamation	n [	Well Integrity
;	Subsequent Report	Casing Repair	New Construction	Recomplet	. [	X Other Request for
	Final Abandonment Notice	Change Plans	Plug and Abandon	Temporari	ly Abandon	Extension of
		Convert to Injection	n Plug Back	Water Dis	posal	Approved APD
If the propos Attach the Be following con testing has be determined the	posed or Coommpleted Operation (clear is at is to deepen directionally or recompond under which the work will be per impletion of the involved operations. If een completed. Final Abandonment N at the final site is ready for final inspection are Energy Corporation recoved "Application For Power	olete horizontally, give sulformed or provide the B the operation results in a ocices shall be filed only a.)	osurface locations and measured No. on file with BLM/ multiple completion or receivafter all requirements, included the state of the st	red and true verti BIA. Required su completion in a nev luding reclamation	cal depths of all p beequent reports sl w interval, a Form , have been comp	pertinent markers and zones. hall be filed within 30 days in 3160-4 shall be filed once
. A d	rilling program is tenta	tively planned to	begin the 3rd qu	arter of 20	01.	
	<u> Uta</u>	roved by the h Division of	20. 1995 10. 1905 10. 1905 10. 1905 10. 1905 10. 1905 10. 1905 10. 1905 10. 1905 10. 1905 10.	1	RECE	IVED
	14-19-01	as and Mining	V - 1/2		APR 0	2 2001
\$0 0.22 major	CHO Date: O	Mail J			DIVISIO	ON OF
	By:	miles 1		(	OIL, GAS AN	

14. I hereby certify that the foregoing is true and correct Name (Printed/Typed)  Victoria Guidry	Title Production	n/Regulatory Coordinator
	Date 3/30/01	
THIS SPACE FOR FEDERA	L OR STATE OFFICE	USE
Approved by	Title	Date
Conditions of approval, if any, are attached. Approval of this notice does not warrant certify that the applicant holds legal or equitable title to those rights in the subject lewhich would entitle the applicant to conduct operations thereon.		

fraudulent statements or representations as to any matter within its jurisdiction.

r Onivi 9	STATE OF UTAH	•	
DIVISIO	N OF OIL, GAS AND MIN	NING	5. Lease Designation and Serial Number UTU-65972
SUNDRY NO	TICES AND REPORTS O	N WELLS	6. Indian, Allottee or Tribe Name:
Do not use this form for proposals to drill r	new wells, deepen existing wells, or to	reenter plugged and abandoned wells.	7. Unit Agreement Name:
	R PERMIT TO DRILL OR DEEPEN form		NA Cone Creek
1. Type of Well: OIL X GAS	OTHER:		8. Well Name and Number: Kane Springs #11-1 Cane Creek
2. Name of Operator			9. API Well Number:
Aviara Energy Corporation			43-019-31364
3. Address and Telephone Number.			10. Field and Pool, or Wildcat Wildcat
P.O. Box 1350. Houston TX 4. Location of Well	77251-1350	713-871-3400	
Footages: 2220 FNL & 2060	* FWL		County: Grand
	. 11, T26S, R19E		State: Utah
JE/IM JCC		TUDE OF NOTICE DEPONT OF	
11. CHECK APPROPRIATE		TURE OF NOTICE, REPORT, OR SUBSEQUEN	
(Submit in Dupli	icate)	(Submit Origina	il Form Only)
Abandon	New Construction	Abandon*	New Construction
Repair Casing	Pull or Alter Casing	Repair Casing	Pull or Alter Casing
Change of Plans	Recomplete	Change of Plans	Perforate
Convert to Injection	Perforate	Convert to Injection	☐ Vent or Flare
Fracture Treat or Acidize	Vent or Flare	Fracture Treat or Acidize	Water Shut-Off
Multiple Completion	Water Shut-Off	Other	
X Other Request for Exter	ision of approved APD	Date of work completion	
Approximate date work will start	April 2002	Report results of Multiple Completions and COMPLETION OR RECOMPLETION REPORT A	Recompletions to different reservoirs on WELL ND LOG form.
		Must be accompanied by a cement verification	n report.
2. DESCRIBE PROPOSED OR COMPLETED OPERATION	ONS (Clearly state all pertinent details, and	d give pertinent dates. If well is directionally drilled	l, give subsurface locations and measured and true
vertical depths for all markers and zones pertinen	it to this work.)		
A		automatom of the	
		a one year extension of the the above referenced well.	
		gin sometime in April 2002. 7-1 well first, then procee	dina
to drill the Kane Spring			unig
		•	
	1		
	Mid Doni	ny W. Worthington	
13. Name & Signature		Environmental. Safety & Re	Date 4/02/02
(This space for State use only)			The state of the s
Annual by the			
Approved by the Uta: Division of	€. 		APR 0 3 2002
Oil, Gas and Minin	ig ,		≠91 11 <b>U J LUGE</b>
(5Date: 04-18-02	( ( )		DIVISION OF
$\mathcal{D}$	(See Instruction	ns on Reverse Side)	IL, GAS AND MINING
By: Badey			



One Riverway, Suite 700 Houston, Texas 77056



April 2, 2002

ACT : 1 2002

DIVISION OF OIL, CAS AND MINING

State of Utah

Division of Oil, Gas, & Mining

Attn: Brad Hill

1594 West North Temple, Suite 1210

Salt Lake City, UT 84114

Reference:

Kane Springs #7-1 Kane Springs #11-1 Kane Springs #30-1 Grand County, Utah

Dear Mr. Hill:

Enclosed please find "Sundry Notices and Reports on Wells" requesting a one year extension of the approved "Application For Permit To Drill, Deepen, or Plug Back" for the above referenced wells.

A drilling program is tentatively planned to begin sometime this month, April 2002. The program calls for drilling the Kane Spring 7-1 well first, then proceeding to drill the Kane Springs 30-1, and then the Kane Springs 11-1.

Please contact me at 713-871-3400 should you have any questions or require additional information. Thank you for your assistance.

Very truly yours,

AVIARA ENERGY CORPORATION

Victoria Guidry

Production/Regulatory Coordinator

/vig

**Enclosures** 

H:\...\docs\Utah\002

-	^.	1		٠	ć . v	•	1 -	 ٠.			7 1	
	τ	ŧ,		٠	4	٠	, .		3	į )	٠,	
- 1		1 :				1	4 -			: :	3 [	
- 1		1 1	5		2	ì	1. 1		- 1			
•		نم يا	3		2	1	1. 2	 		1 1	11.	
	_		•	•	•	•	•	 •	•			•

	ORM 9	OTATE OF LITAL		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
SUNDRY NOTICES AND REPORTS ON WELLS  Do not use this form for proposals to drill new wells, deepen existing wells, or to reenter plugged and abandoned wells.  NA  7. Unit Agreement Name: NA  1. Well Name and Number: NB  1. Well Name and Number: NB  1. Set Well Nam	DIVISION	STATE OF UTAH	ING	5. Lease Designation and Serial Number
SUNDRY NOTICES AND REPORTS ON WELLS  Do not use this form for proposals to drill new wells, deepen existing wells, or to reenter plugged and abandoned wells.  To this greement Name.  NA  To this gre	DIVISION			
SUNDRY NOTICES AND REPORTS ON WELLS  Do not use this form for proposals to drill now wells, deepen existing wells, or to reenter plugged and abandoned wells.  Use APPLICATION FOR PERMIT TO DRILL OR DEEPEN form for such purposes  Vipe of Well:  OIL X GAS OTHER:  See APPLICATION FOR PERMIT TO DRILL OR DEEPEN form for such purposes  OIL X GAS OTHER:  8. Well Name and Number:  8. Well Name and Number:  9. API Well Number:  9. API Well Number:  9. API Well Number:  10. Field and Pool, or Wildcat  Wildcat  Wildcat  VIDENTIAN SEE AND SEE. 11, 7251-1350  T13-871-3400  Location of Well  Footages: 2220* FNL & 2060* FNL  GOLOGIO, T. R. M.: SE/NM Sec. 11, 7265, R19E  CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA  NOTICE OF INTENT  (Submit in Duplicate)  Abandon New Construction Abandon* Subsecuent REPORT  Notice of Plans Recomplete Change of Plans Perforate  Convert to Injection Perforate  Convert to Injection Perforate  Convert to Injection Water Shut-Off  Multiple Completion Water Shut-Off  Other Request for Extension of approved APD  April 2002  Provides Reported Province Line will be different reservoirs on WELL COMPLETED OPERATIONS (Clearly state all pertinent dates). If well is directionally drilled, give subsurface locations and measured and to Mustiple Completion on Proport.				
Do not use this form for proposals to drill new wells, deepen existing wells, or to reenter plugged and abandoned wells.  Use APPLICATION FOR PERMIT TO DRILL OR DEEPEN form for such purposes  7. Unit Agreement Name.  NA  Canc Cac E  8. Well Name and Number:  8. Well Name and Number:  8. API Well Number:  43-019-31364  10. Field and Pool, or Wildcat  Wildcat  P.O. BOX 1350. Houston TX 77251-1350  713-871-3400  Location of Well  County: Grand  Gol.sec. T. R. M: SE/NW Sec. 11, T26S, R19E  CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA  NOTICE OF INTENT  (Submit to righted Form only)  Abandon  Repair Casing  Pull or Alter Casing  Repair Casing  Pull or Alter Casing  Repair Casing  Pull or Alter Casing  Repair Casing  Change of Plans  Convert to Injection  Perforate  Vent or Flare  Water Shut-Off  Other Request for Extension of approved APD  pproximate date work will start  Apr 11 2002  Proceeded Reports Or Recompletions and Recompletions to different reservoirs on WELL  COMPLETION OR RECOMPLETED OPERATIONS (Clearly state all pertinent dates). It well is directionally drilled, give subsurface locations and measured and to the second and the second a	STINDRY NO	CICES AND REPORTS OF	N WELLS	
Do not use this form for proposals to diff new wells, deepen existing wells, or to reemer pugged and autanotes wells.  Use APPLICATION FOR PERMIT TO DRILL OR DEEPEN form for such purposes  R. Well Name and Number:  **Rane Springs #11-1  **Sun Cruz**  8. Well Name and Number:  **Rane Springs #11-1  **Can Cruz**  8. Well Name and Number:  **Rane Springs #11-1  **Can Cruz**  8. Well Name and Number:  **Rane Springs #11-1  **Can Cruz**  8. Well Name and Number:  **Rane Springs #11-1  **Can Cruz**  8. Well Name and Number:  **Rane Springs #11-1  **Can Cruz**  8. Well Name and Number:  **Rane Springs #11-1  **Can Cruz**  8. Well Name and Number:  **Can Cruz**  8. Well Name and Number:  **Rane Springs #11-1  **Can Cruz**  8. Well Name and Number:  **Rane Springs #11-1  **Can Cruz**  8. Well Name and Number:  8. Well Name and Number:  **Can Cruz**  8. Well Name and Number:  8. Well Name	<del> </del>			
Type of Well: OIL X GAS OTHER    S. Well Name and Number: Rame Spr Hings \$11-1   Can Charles Spr	Do not use this form for proposals to drill no	w wells, deepen existing wells, or to	reenter plugged and abandoned wells.	NA .
Name of Operator  Aviara Energy Corporation  Address and Telephone Number:  P.O. Box 1350, Houston TX 77251-1350  Footages: 2220' FNL & 2060' FWL  County: Grand  GO. Sec., T. R. M.: SE/NW Sec. 11, T26S, R19E  CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA  NOTICE OF INTENT  (Submit in Duplicate)  Abandon  Repair Casing  Change of Plans  Convert to Injection  Perforate  Convert to Injection  Perforate  Water Shut-Off  Water Shut-Off  Water Shut-Off  Water Shut-Off  Approximate date work will start  Apr 11 2002  Report results of Multiple Completions and Recompletions to different reservoirs on WELL  COMPLETION OR RECOMPLETED OPERATIONS (Clearly state all pertinent details, and give perfinent dates. If well is directionally drilled, give subsurface localions and measured and to the subsurface	Use APPLICATION FOR	PERMIT TO DRILL OR DEEPEN TOTAL	ii ioi sacri parposes	Cone Creek
Name of Operator  Aviara Energy Corporation  Address and Telephone Number.  P.O. Box 1350, Houston TX 77251-1350  Location of Well Footages: 2220' FNL & 2060' FWL  BHL 800 FHL 800 FWL HWHW  County: Grand  County: Gra				
Name of Operator  Aviara Energy Corporation  Address and Telephone Number.  P.O. Box 1350. Houston TX 77251-1350  Location of Well Footages: 2220° FNL & 2060° FWL  BHL 800 FHL 800 FWL	Type of Well: OIL 🔽 GAS	OTHER:		<del>Kane Şprin</del> gş #1ļ-1
Name of Operator  Aviara Energy Corporation  Address and Telephone Number.  P.O. Box 1350. Houston TX 77251-1350  Location of Well  Footages: 2220' FNL & 2060' FWL  COUNTY: Grand  GQ.Sec., T., R., M: SE/NW Sec. 11, T265, R19E  CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA  NOTICE OF INITENT (Submit in Duplicate)  Abandon  Repair Casing  Change of Plans  Change of Plans  Convert to Injection  Perforate  Convert to Injection  Practure Treat or Acidize  Multiple Completion  Water Shut-Off  Multiple Completion  April 2002  April 2002  Paper results of Multiple Completions and Recompletions to different reservoirs on WELL COMPLETION REPORT AND LOG form.  *Must be accompanied by a cement verification report.  PRESCRIBE PROPOSED OR COMPLETED DEFEATIONS (Clearly state all pertinent details, and give pertinent dates. It well is directionally drilled, give subsurface locations and measured and to the proposed points of the proposed price of the prescribed price of the prescribed proposed price of the prescribed price of the price of the prescribed price of the price of the price of the prescribed price of the price o				<u> </u>
Address and Telephone Number.  P.O. Box 1350, Houston TX 77251-1350  Coation of Well Footages: 2220° FNL & 2060° FWL  BHL 800 FHL 800 FWL	Name of Operator			9. API Well Number:
Address and Telephone Number.  P.O. Box 1350, Houston TX 77251-1350  Location of Well Footages: 2220' FNL & 2060' FWL  BHL 800 FHL 800 FWL HWHW  COUNTY: Grand  County: Grand  State: Utah  CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA  NOTICE OF INTENT (Submit in Duplicate)  Abandon  New Construction Repair Casing Pull or Alter Casing Repair Casing Change of Plans Convert to Injection Perforate Convert to Injection Perforate Convert to Injection Perforate Water Shut-Off Other Request for Extension of approved APD  April 2002  Report results of Multiple Completions and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETED OPERATIONS (Clearly state all pertinent details, and give perfinent dates. It well is directionally difiled, give subsurface locations and measured and to	Aviara Fnergy Corporation			
P.O. Box 1350, Houston TX 77251-1350  713-871-3400  Footages: 2220° FNL & 2060° FWL BHL 800 FWL 800 FWL WWAD  GO.Sec., T., R., M.: SE/NW Sec. 11, T26S, R19E  CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA  NOTICE OF INTENT (submit in Duplicate)  New Construction Repair Casing Pull or Alter Casing Change of Plans Convert to Injection Perforate Convert to Injection Perforate Vent or Flare Water Shut-Off Multiple Completion Water Shut-Off Other Request for Extension of approved APD  Date of work completions and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and to				14
Location of Well Footages: 2220* FNL & 2060* FWL  GG.Sec., T., R. M.: SE/NW Sec. 11, T265, R19E  CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA  NOTICE OF INTENT (Submit in Duplicate)  New Construction  New Construction  Repair Casing  Pull or Alter Casing  Change of Plans  Convert to Injection  Perforate  Convert to Injection  Practure Treat or Acidize  Water Shut-Off  Multiple Completion  Other  Request for Extension of approved APD  Date of Work completions and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and to	Address and Telephone Number.			Wildcat
County: Grand   County: Grand   State: Utah   County: Grand	P.O. Box 1350, Houston TX	77251-1350	713-871-3400	
CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA  CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA  NOTICE OF INTENT (Submit in Duplicate)  Abandon  New Construction  Repair Casing  Pull or Alter Casing  Change of Plans  Convert to Injection  Perforate  Convert to Injection  Perforate  Vent or Flare  Water Shut-Off  Multiple Completion  Water Shut-Off  Other  Request for Extension of approved APD  Date of work completions and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETION REPORT AND LOG form.  * Must be accompanied by a cement verification report.  * Must be accompanied by a cement verification report.  **  **  **  **  **  **  **  **  **			II COOK I HUNG)	A
CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA  NOTICE OF INTENT (Submit In Duplicate)  Abandon  New Construction  Repair Casing  Pull or Alter Casing  Repair Casing  Pull or Alter Casing  Change of Plans  Convert to Injection  Perforate  Convert to Injection  Perforate  Vent or Flare  Water Shut-Off  Multiple Completion  Water Shut-Off  Other  Request for Extension of approved APD  Date of work completions and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETION REPORT AND LOG form.  * Must be accompanied by a cement verification report.	Footages: 2220' FNL & 2060'	FWL 0112 800 P1	AL 800 FWE FW.	County: Grand
CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA  NOTICE OF INTENT (Submit In Duplicate)  New Construction   Abandon				State: <b>Utah</b>
NOTICE OF INTENT (Submit in Duplicate)  Abandon  New Construction  Repair Casing  Pull or Alter Casing  Change of Plans  Convert to Injection  Perforate  Convert to Injection  Practure Treat or Acidize  Water Shut-Off  Other  Request for Extension of approved APD  Apr 11 2002  Report results of Multiple Completions and Recompletions to different reservoirs on WELL  COMPLETION OR RECOMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and to				
NOTICE OF INTENT (Submit in Duplicate)  Abandon  New Construction  Repair Casing  Pull or Alter Casing  Change of Plans  Convert to Injection  Perforate  Convert to Injection  Perforate  Vent or Flare  Practure Treat or Acidize  Water Shut-Off  Other  Request for Extension of approved APD  Apr 11 2002  Report results of Multiple Completions and Recompletions to different reservoirs on WELL  COMPLETION OR RECOMPLETION REPORT AND LOG form.  * Must be accompanied by a cement verification report.	CHECK APPROPRIATE	BOXES TO INDICATE NA	TURE OF NOTICE, REPORT, OR	OTHER DATA
Abandon   New Construction   Abandon*   New Construction   Repair Casing   Pull or Alter Ca	NOTICE OF IN	TENT	SUBSEQUE	NT REPORT
Repair Casing	(Submit in Dupli	cate	(Callinia Sirginia	
Repair Casing	Abandon	New Construction	Abandon*	New Construction
Change of Plans	₹ ```	Bull or Alter Casing	Repair Casing	Pull or Alter Casing
Convert to Injection	<b>5</b>			Perforate
Convert to Injection  Fracture Treat or Acidize  Water Shut-Off  Other Request for Extension of approved APD  Other Report results of Multiple Completions and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETION REPORT AND LOG form.  *Must be accompanied by a cement verification report.	Change of Plans			Vent or Flare
Multiple Completion				
Other Request for Extension of approved APD  Date of work completion  Approximate date work will start  April 2002  Report results of Multiple Completions and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETION REPORT AND LOG form.  * Must be accompanied by a cement verification report.  PRESCRIPE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and to	Fracture Treat or Acidize			
Approximate date work will start  Apr 11 2002  Report results of Multiple Completions and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETION REPORT AND LOG form.  * Must be accompanied by a cement verification report.  **DESCRIPT PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and to	Multiple Completion	Water Shut-Off	Other	
Report results of Multiple Completions and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETION REPORT AND LOG form.  * Must be accompanied by a cement verification report.  **DESCRIPT PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and to	Request for Exter	nsion of approved APD	1	
COMPLETION OR RECOMPLETION REPORT AND LOG form.  * Must be accompanied by a cement verification report.  * Must be accompanied by a cement verification report.  * PRESENCE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and to	Other		Date of work completion	
* Must be accompanied by a cement verification report.  **DESCRIPE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and to		Annil 2002	Report results of Multiple Completions and	d Recompletions to different reservoirs on WELL
DESCRIPE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and to	Approximate date work will start	ADI 11 ZOUZ	COMPLETION OR RECOMPLETION REPORT	AND LOG form.
DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and to vertical depths for all markers and zones pertinent to this work.)			Must be accompanied by a cement verifical	tion report.
DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and vertical depths for all markers and zones pertinent to this work.)				to the state and the state and the
vertical depths for all markers and zones pertinent to this work.)	DESCRIBE PROPOSED OR COMPLETED OPERAT	IONS (Clearly state all pertinent details, as	nd give pertinent dates. If well is directionally drill	ied, give subsurface locations and measured and tro
	vertical depths for all markers and zones pertine	it to this work.)		
	Autona Enongy Corporati	on respectfully request	s a one year extension of th	ne
Aviera Energy Corporation respectfully requests a one year extension of the	annoved "Annideation F	or Permit to Drill" for	the above referenced well.	
Aviara Energy Corporation respectfully requests a one year extension of the	approved Apprication i	or remite to be the total		
Aviara Energy Corporation respectfully requests a one year extension of the approved "Application For Permit to Drill" for the above referenced well.	A drilling program is t	entatively planned to b	egin sometime in April 2002.	•
approved "Application For Permit to Drill" for the above referenced well.  A drilling program is tentatively planned to begin sometime in April 2002.	The program calls for d	rilling the Kane Spring	s 7-1 well first, then proce	eeding
approved "Application For Permit to Drill" for the above referenced well.  A drilling program is tentatively planned to begin sometime in April 2002.	to drill the Kane Soria	os 30-1, and then the K	ane Springs 11-1.	
approved "Application For Permit to Drill" for the above referenced well.  A drilling program is tentatively planned to begin sometime in April 2002.  The program calls for drilling the Kane Springs 7-1 well first, then proceeding	to di tri the Rule opi in	De de el mile alleit che ti		
approved "Application For Permit to Drill" for the above referenced well.  A drilling program is tentatively planned to begin sometime in April 2002.				
approved "Application For Permit to Drill" for the above referenced well.  A drilling program is tentatively planned to begin sometime in April 2002.  The program calls for drilling the Kane Springs 7-1 well first, then proceeding				
approved "Application For Permit to Drill" for the above referenced well.  A drilling program is tentatively planned to begin sometime in April 2002.  The program calls for drilling the Kane Springs 7-1 well first, then proceeding				
approved "Application For Permit to Drill" for the above referenced well.  A drilling program is tentatively planned to begin sometime in April 2002.  The program calls for drilling the Kane Springs 7-1 well first, then proceeding to drill the Kane Springs 30-1, and then the Kane Springs 11-1.				
approved "Application For Permit to Drill" for the above referenced well.  A drilling program is tentatively planned to begin sometime in April 2002.  The program calls for drilling the Kane Springs 7-1 well first, then proceeding	12 // 64	//////////////////////////////////////	nny W. Worthington	

Mgr: Environmental, Safety & Reg. 4/02/02 (This space for State use only) COPY SENT TO OPERATOR Approved by the Utah Division of Oil, Gas and Mining Date: AFR 0 3 2002 DIVISION OF OIL, GAS AND MINING

(See Instructions on Reverse Side)

## TED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPRO	VED
Budget Bureau No.	1004-0135
Expires July 31,	1996

_					
•	1	-	50	Serial	NΩ

BUREAU OF L	AND MANAGEMEN	ı		5. Lease Serial	No.
SUNDRY NOTICES	AND REPORTS ON Y	WELLS	ļ	UTU-65972	
Do not use this form for papardoned well. Use Form				6. If Indian, All	lottee or Tribe Name
SUBMIT IN TRIPLICATE -	Other instructions on r	everse side			A/Agreement, Name and/or No.
		NIEIDENITH	ч——	Cane Cre	ek Unit Agreement
1. Type of Well    X Oil Gas Other		INCIDENTI	<u> </u>	8. Well Name a Cane Creek	and No.
2. Name of Operator Aviara Energy Corporation					
3a. Address	3b.	Phone No. (include area o	ode)	9. API Well No 43-019-31	
P.O. Box 1350, Houston TX 77251-13	350 71	3-871-3400			ool, or Exploratory Area
<ol> <li>Location of Well (Footage, Sec., T., R., M., or Survey Descrip 2220° FNL &amp; 2060° FWL</li> </ol>	ption)			Wildcat	
SE NW Sec. 11, T26S, R19E				11. County or I	
				Grand Cou	
12. CHECK APPROPRIA	ATE BOX(ES) TO INDIC	ATE NATURE OF NOT	TICE, REPORT,	OR OTHER DA	TA
TYPE OF SUBMISSION		TYP	E OF ACTION		
X Notice of Intent	Acidize	Deepen	Production	(Start/Resume)	Water Shut-Off
<u></u>	Alter Casing	Fracture Treat	Reclamation	n	Well Integrity
X Subsequent Report	Casing Repair	New Construction	Recomplete	, [	X Other Notification
Final Abandonment Notice	Change Plans	Plug and Abandon	Temporaril	y Abandon	of Well
<u>—</u>	Convert to Injection	Plug Back	Water Disp	osal	Name Change
This well name has been cha new name of Cane Creek Fede		tious name of Kar	ne Springs <del>i</del>	<b>∲11-1 to t</b> h	e
14. I hereby certify that the foregoing is true and correct	. // /	Title			
Name (Printed/Typed) Victoria Guidry	: Xludry		tion/Regula	atory Coord	inator
		Date 05/06			
THIS	S SPACE FOR FEDER	AL OR STATE OFF	ICE USE	ECFI	VED
Approved by		Title	- 41	Total	
Conditions of approval, if any, are attached. Approval o certify that the applicant holds legal or equitable title to which would entitle the applicant to conduct operations thereon	those rights in the subject	lease		MAY 0 9 2	
Title 18 U.S.C. Section 1001, makes it a crime for any fraudulent statements or representations as to any matter within	y person knowingly and willf n its jurisdiction.	ully to make to any dep	ertment or agenc	GAS AND	MINING



One Riverway, Suite 700 Houston, Texas 77056

May 22, 2002

State of Utah
Division of Oil, Gas, & Mining
Attn: Diana Mason
1594 West North Temple, Suite 1210
Salt Lake City, UT 84114

Reference:

Cane Creek Federal #11-1 API Well No. 43-019-31364 Grand County. Utah

Dear Ms. Cordova:

Please include this letter and the enclosed location plat as attachments to the Sundry Notice submitted on May 8, 2002 which requests approval to amend the approved "Application For Permit to Drill" for the above referenced well.

R649-3-2 (#3) of The Oil and Gas Conservation General Rules of the Utah Division of Oil, Gas and Mining states that:

"In the absence of special orders of the Board, no portion of the horizontal interval within the potentially productive formation shall be closer than six hundred-sixty (660) feet to a drilling or spacing unit boundary, federally unitized area boundary, uncommitted tract within a unit, or boundary line of a lease not committed to the drilling of such horizontal well."

This letter serves as notice that the Cane Creek Federal #11-1 location complies with this rule.

Please contact me at 713-871-3400 should you have any questions or require additional information. Thank you for your assistance with this matter.

Very truly yours,

**AVIARA ENERGY CORPORATION** 

Victoria Guidry

**Production/Regulatory Coordinator** 

/vig

docs\reg\050h

RECEIVED

MAY 23 2002

DIVISION OF OIL, GAS AND MINING

#### UNI STATES DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT**

#### SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an

FORM APPROVED
---------------

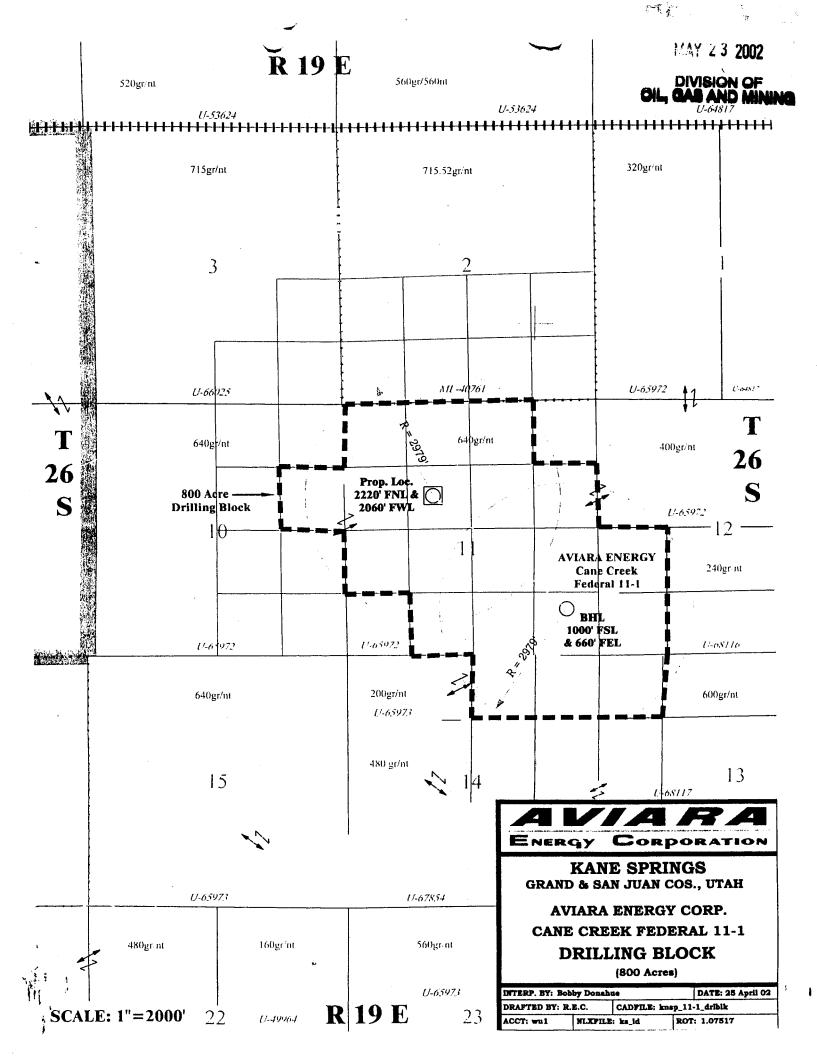
Budget Bureau No. 1004-0135 Expires July 31, 1996

5. Lease Serial No.

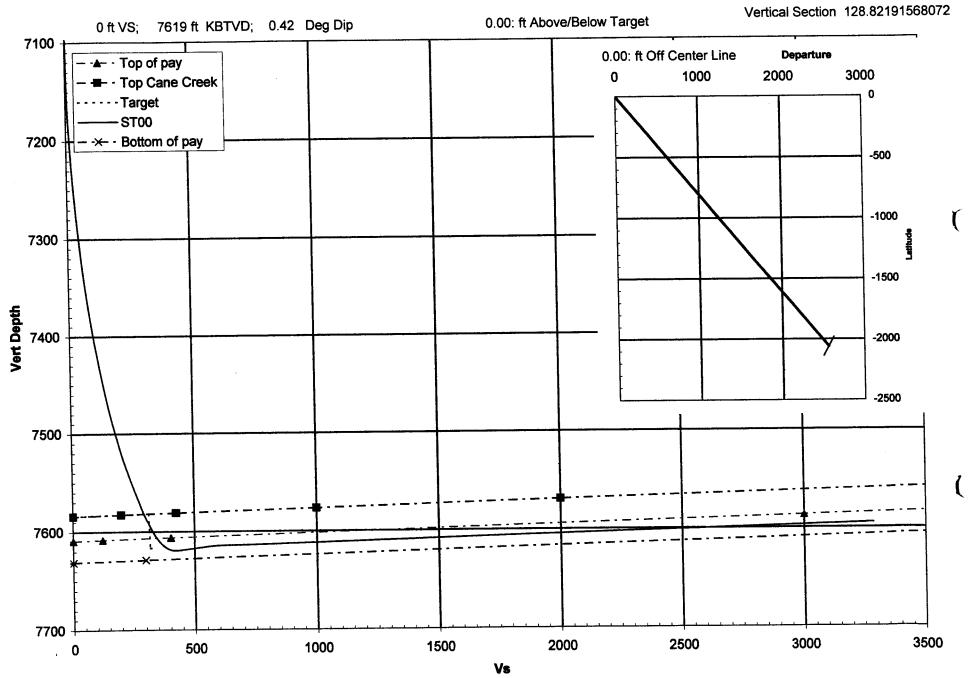
ΙTΙ	ı.	65	Q	72
 ,,,	, -			, ,

6. If Indian, Allottee or Tribe Name

abandoned well. Use Fon	m 3160-3 (APD) for such proposals.	
	- Other instructions on reverse side	7. If Unit or CA/Agreement, Name and/or No Cane Creek Unit Agreement
1. Type of Well    X   Oil   Gas   Other   2. Name of Operator   Other	AMENDED	8. Well Name and No. Cane Creek Federal #11-1
Aviara Energy Corporation  3a. Address	3b. Phone No. (include area code)	9. API Well No. 43-019-31364
P.O. Box 1350, Houston TX 77251-1:  4. Location of Well (Footage, Sec., T., R., M., or Survey Description of Well (Footage, Sec., T.		
12. CHECK APPROPRI	ATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPO	ORT, OR OTHER DATA
TYPE OF SUBMISSION	TYPE OF ACTI	ON
Notice of Intent  Subsequent Report	Alter Casing Fracture Treat Recla	mation (Start/Resume) Water Shut-Off Well Integrity Tyles Other Amend
Final Abandonment Notice	Change Plans Plug and Abandon Temp	orarily Abandon  Disposal  Approved APD
Amendments to the drilling prochanges are in red (highlighter - The bottom hole location has	ed in yellow on copies).  been changed to 1000' FSL & 660' FEL SESE	1247487Y 38.55137 405946 X -109.78418
- On the 20° casing a rotating (No annular preventer will b	phead will be used to drill to the Chinle be used)	Red Beds
•	Pederal Approval of this Action is Necessary	COPY SENT TO OPERATOR Date: 6-6-00 Initials CHD
14. I hereby certify that the foregoing is true and correct Name (Printed/Typed)  Victoria Guidry		ulatory Coordinator
- Int	Date 05/08/02	
Approved by	SPACE FOR FEDERAL OR STATE OFFICE USE  Title BRADLEY G. HIL	Date 06-05-02
Conditions of approval, if any, are attached. Approval of certify that the applicant holds legal or equipple title to which would entitle the applicant to conduct operations thereon.	this notice does not warrant <b>AEGLAMATION SPECIA</b> those rights in the subject lease	
Title 18 U.S.C. Section 1001, makes it a crime for any fraudulent statements or representations as to any matter within	person knowingly and willfully to make to any department or as its jurisdiction.	gency of the United States any false, fictitious or



### Aviara Energy Corp., Kane Springs No. 11-1



#### Bureau of Land Management Moab District

### Application for Permit to Drill

On-Site Inspection Checklist

Company	AVIARA ENERGY C	ORP. Well No.	CANE CREEK FEDERAL #	11-1
	ec. <u>11</u> , T. <u>26S</u> , R			
On-Site Insp	ection Date 8/19/97 (Held	i prior to NOS/APD to	screen VRM concerns)	
CFR δ 3100 operator is field represe	i), Onshore Oil and Gas On the action of the	rders, the approved place on the contractor of his subcontractor of the contractor o	npliance is made with applicab in of operations and the condit rs. A copy of these conditions	HOUS OF ADDITIONAL THE
A. <u>DRILLIN</u>	<u>IG PROGRAM</u>			
FO	nce Formation and Estimates RMATION TOPS vaio Sandstone	SUBSEA	DEPTH (RKB=:	25)
	inle	5450	695	
+	tler	4	149	<del></del>
	rmosa	2407	374	
	adox Salt	1892	425	
	ne Creek	-1437	758	<u>54</u>
Ex Ex Ex Al an tal	spected Oil Zones: Cane Cresceted Gas Zones: Spected Water Zones: Navigation of the Properties of Water and Prospective Company of the Compan	aho Sandstone - Surface vely valuable minerals sted. When possible, we results being submitted.	s encountered during drilling water flow rates will be measured to BLM. All oil and gas	RKB=25'): 0' rill be recorded by depth red and samples will be shows will be tested to
pr SI ty th	ocedures: URFACE (0-750') & UPPE A rotating head and blooie I pe and preventer will be utile hole (See Exhibit C-1). OWER INTERMEDIATE One (1) annular bag-type an	R INTERMEDIATE () ine will be rigged up o ilized while drilling the INTERVAL 4.300'-7.7 id (3) ram-type prevent	intermediate hole to 4,300' in t	pe. One (1) annular bag- the air drilling interval of ag below the intermediate of working pressure or a
<u>m</u> a_	minimum of seventy percent (5	50%) of working pressu	re. (See Exhibit C-2).	

Choke Manifold will meet or exceed the requirements of the typical 5M manifold as in Onshore Order #2. Two remote operated hydraulic chokes installed prior to drilling into the Cane Creek. One panel will be located on the rig floor and the other panel on the ground (See Exhibit C-2).

HORIZONTAL INTERVAL 7,711' - 10,689'

While drilling horizontally through the Cane Creek formation a high pressure rotating head diverter will be installed on top of the annular preventer. The static working pressure will equal or exceed 2,500 psi and the rotating working pressure will equal or exceed 1,500 psi. The rotating head will be tested to 3,000 psi with a test cap. (See Exhibit C-3).

A large atmospheric gas buster rated at a minimum of 50 mmscf/day with a minimum of 8" x 150' flare line routed to flare pit. The flare line is to be equipped with an electric igniter.

This equipment will be utilized to safely control well pressures and produced fluids while drilling into the potentially fractured Cane Creek formation.

BOP systems will be consistent with API RP 53 and Onshore Oil and Gas Order No. 2. Pressure tests of the surface casing and all BOP equipment potentially subject to pressure will be conducted before drilling the surface casing shoe. Blowout preventer controls will be installed prior to drilling the surface casing shoe and will remain in use until the well is completed or abandoned. Ram preventers shall be inspected and operated each trip (no more than once a day is necessary), and annular preventers shall be inspected and operated weekly to ensure good mechanical working order. These inspections shall be recorded in the drilling log and in the daily drilling report.

4. Casing Program and Auxiliary Equipment -include casing size, weight, grade, thread and coupling, setting depth and condition (new or acceptably reconditioned):

SURFACE PIPE:

0-750' INTERVAL; 13-3/8" SIZE; 54.5 WT; K-55 GR; BTC CONN; 2730/5.38 BURST/SF; 1130/3.22 COLLAPSE/SF; 1038/7.37 TENSION/SF. Set ± 50' below top of Chinle Red Beds. Tension safety factor calculated using air weight with 100 klbs overpull. Pressure test to 70% of casing burst or 1900 psi before drilling out of shoe.

**INTERMEDIATE PIPE:** 

0-4300' INTERVAL; 9-5/8" SIZE; 40 WT; L-80 GR; LTC CONN; 5750/1.63 BURST/SF; 3090/1.54 COLLAPSE/SF; 737/2.71 TENSION/SF. Set ± 50' below top of Paradox Salt. Tension safety factor calculated using air with 100 klbs overpull. Collapse design based on 9.0 ppg emw gradient with no backup fluid (casing evacuated). Collapse design neglects salt creep load in Paradox Salt. Burst design based on maximum surface pressure calculated by subtracting a gas gradient of 0.115 psi/ft from a fracture gradient of 17.0 ppg + 1.0 ppg SF. A burst backup fluid of 9.0 ppg was used. Pressure test to 70% of casing burst or 4000 psi before drilling out of shoe.

PRODUCTION	PIPE:					<del></del>	
INTERVAL	SIZE	WT	GR	CONN	BURST/SF	COLLAPSE/SF	TENSION/SF
0-4000'	7	26	L-80	LTC	7240-1.45	5410/1.63	519/1.93
4000-7711'	7	32	HCL-80	LTC	9060/1.99	10400/1.65	738/3.89

Set ± 10' TVD below top of Cane Creek. Tension safety factor calculated in 16 ppg mud with 100 klbs overpull, Collapse design based on 16 ppg EMW gradient from 0 to 7591' TVD/7711' MD, with casing evacuated. Burst design based on maximum surface pressure equal to a fracture pressure of 18.5 ppg + 1.0 ppg SF less an oil gradient of 0.355 psi/ft. Production casing design exceeds drilling design. The packer fluid density and burst backup fluid density are assumed to be equal. Pressure test to 3600 psi or 70% of casing burst before drilling out of shoe.

PRODUCTION LINER: N/A

AUXILIARY EQUIPMENT:			
Α.	A kelly cock will be kept in the string at all times.		
B.	A stabbing valve will be kept on the derrick floor at all times.		
<del>7.</del>	Drill nine floats will be used while air drilling.		
<u>D.</u>	Tandem floats will be placed above MWD and downhole motors in the drill string when drilling in		
	the Cone Creak formation		
E.	A large atmospheric gas buster rated at a minimum of 50 mmscf/day with a minimum of 8" x 150"		
	flore line routed to flare nit. The flare line is to be equipped with an electric igniter.		
<u>F.</u>	Two remote operated hydraulic chokes installed prior to drilling into the Cane Creek. One panel		
<u>+</u>	will be located on the rig floor and the other panel on the ground.		
G.	Visulogger rigged up after drilling out of 9-5/8" casing.		
<u>у.                                    </u>	Top Drive to be rigged up prior to drilling out of 7" casing.		
3-L			
Cement	include the cement type, density, yield, additives and amount used in setting each casing string.		
A 1 !	-1. 1. the entire tool coment fill up. It stage comenting describe techniques.		
WIND III	ACE PIPE: Lead w/ 396 sks Premium Lite II + 2% CaCl <sub>2</sub> 0.25 #/sk Cello Flake + 3 #/sk gilsonitel		
DUKEA	CE FIFE: Leat W/ 370 sks Trumbul 200 also Class G + 296 CaCl +		

+ 8% Bentonite + 0.5% Sodium Metasilicate, 12.0 ppg 2.31 yield. Tail w/ 200 sks Class G + 2% CaCl<sub>2</sub> + 0.25 #/sk Cello Flake, 15.8 ppg, 1.17 yield. TOC-surface.

INTERMEDIATE PIPE: Lead w/ 403 sks Premium Lite + 3#/sk Silica Fume + 3% KCl + 0.25 #/sk Cello Flake + 3#/sk Gilsonite + 8% Bentonite + 0.5% Sodium Metesilicate, 12 ppg, 2.42 yield. Tail w/ 380 sks CL G neat, 15.8 ppg, 1.15 yield. TOC-1500' w/ 35% excess.

PRODUCTION PIPE: Tail w/ 630 sks Class G + 3% KCl + Fluid loss + Dispersant + Retarder, 16.8 ppg, yield. TOC-4000' w/ 20% excess.

Surface casing shall be cemented back to surface. Centralizers shall be run, at a minimum, on the bottom three joints of each casing string.

6. Mud Program and Circulating Medium -include mud components and weights. When air drilling, also include: length and location of blooie line; description of the auto igniter; description of the de-duster equipment; and amounts, types and characteristics of stand-by mud:

pment; and amounts, types and characteristics of stand-by find.					
DEPTH (MD)	WEIGHT	PV	YP	API WL	ТҮРЕ
0 - 750'					Air/Mist/Water
750' - 4300'					Air/Mist/Water
4300' - 7710'	12 - 16	35 - 60	20 - 24	<10	Oil Based Mud
7710' - 9329'	15 - 18	45 - 60	20 - 24	<10	Oil Based Mud

Blooie line will be to NE side of location and 100' from well. Igniter will be solar/battery powered.

Due to potential for contamination of usable quality water aquifers, chromates are banned from Federal leases.

Sufficient mud materials will be stored on location to maintain well control and combat lost circulation problems that might reasonably be expected.

#### 7. Coring, Logging and Testing Program:

5.

- A. Drill Stem Tests none planned
- B. Well Logging and Intervals:Induction/Sonic//GR 4300' 7081' TVD

  MWD/GR will be attempted from kick off point at 7081' TVD/MD to TD at 7595' TVD/10689'
- C. Cores: A 30' oriented core may be attempted in the Cane Creek formation at the first sign of

fractures.

Directional Surveys: This well as proposed will be drilled vertically to 7576' and then drilled as a D. medium radius well at an azimuth of 128.8 DEG for a total displacement of 3286'. Inclination surveys will be taken at 1000' maximum intervals until KOP. At KOP a multi-shot will be taken. During the angle build portion, surveys will be taken at 90' maximum intervals. During the horizontal portion of the hole, surveys will be taken at 200' maximum intervals.

Samples: One sample will be taken at 10' intervals from 4000 to TVD. E.

Mud Logger: There will be a mud logger on location at 4000' (300' above intermediate pipe depth) F. to TVD.

Completion Procedure: To be submitted on form 5 under "Approval of Subsequent Operations". G.

Where the well is completed as a dry hole or a producer, "Well Completion and Recompletion H. Report and Log" (Form 3160-4) will be submitted not later than 30 days after completion of the well or completion of operations being performed, in accordance with 43 CFR 3164. Two copies of all logs, core descriptions, core analyses, well test data, geologic summaries, sample description, and all other surveys or data obtained and compiled during the drilling, workover, and/or completions operations will be filed with form 3160-4.

Initial opening of drill stem test tools will be restricted to daylight hours.

8. Abnormal Conditions, Bottom Hole Pressures and Potential Hazards - include anticipated bottomhole pressure and/or pressure gradient. Also list anticipated lost circulation zones, abnormal temperature zones and possible hydrogen sulfide bearing zones: Abnormal pressure is anticipated in the Cane Creek formation. The proposed casing program and pressure control equipment has been designed based on the anticipated abnormal pressures of the Cane Creek formation. Flow drilling techniques will be used to safely control surface pressures and well fluid influxes. Pore pressures up to 17.6 ppg are expected. Hydrogen Sulfide is not anticipated.

9. Any Other Aspects of this Proposal that should be Addressed:

Construction of Location is scheduled to start immediately after approval of APD. A.

No location will be constructed or moved, no well be plugged and no drilling or workover B. equipment will be removed from the well to be placed in a suspended status without prior approval

The spud date will be reported orally to the AO within 48 hours after spudding, or on the next C.

business workday if the spud occurs on a weekend.

Spills, blowouts, fires, leaks, accidents or any other unusual occurrences shall be promptly D. reported in accordance with the requirements of NTL-3A or its revisions.

If a replacement rig is contemplated for completion operations, a "Sundry Notice" to that effect E. will be filed, for prior approval of the AO, and all conditions of this approved plan are applicable during all operations conducted with the replacement rig.

Should the well be successfully completed for production, the AO will be notified when the well is F. placed in a production status. Notification will be made no later than five days following the date

on which the well is placed on production.

Venting/flaring of gas during initial well evaluation tests will not exceed a period of thirty days or G. the production of 50 MMCF/day of gas, whichever occurs first. An application will be filed with the District Engineer and approval received, for any venting or flaring beyond the initial 30 day authorized test period.

Well abandonment operations will commence only after prior approval has been received from the H. AO. In the case of newly drilled dry holes or failures, and in emergency situations, oral approval will be obtained from the AO. A "Subsequent Report of Abandonment" will be filed with the AO

within 30 days following completion of the well abandonment operations.

I. There will be no deviation from the proposed drilling and/or workover program without prior approval of the AO. Safe drilling and operating practices will be observed.

J. This well whether drilling, producing, suspended, or abandoned will be identified in accordance with 43 CFR 3162.3-2.

#### B. THIRTEEN POINT SURFACE USE PLAN

The dirt contractor will be provided with an approved copy of the surface use plan of operations before initiating construction.

1.	Existing Roads:				
	a.	Proposed route to location (submit a map depicting access and well location). See Map "A" and "B".			
	b.	Location of proposed well in relation to town or other reference point:  From Moab, 11 miles N on Hwy. 191, left on SR 313 for 13 miles, to location on right side of road.			
	c.	Contact the County Road Department for use of county roads.			
	d.	Plans for improvement and/or maintenance of existing roads: No improvement needed			
	e.	Other:			
2.	Planned Access Roads:				
	a.	Location (centerline): Access road flagged with surveyor's ribbon between location and SR 313.			
	b.	Length of new access to be constructed: 200 ft.			
	c.	Length of existing roads to be upgraded: <u>N/A</u>			
	d.	Maximum total disturbed width: 45 feet			
	e.	Maximum travel surface width: 35 feet			
	f.	Maximum grades: N/A			
	g.	Turnouts: N/A			
	h.	Surface materials: Native soils during drilling. During production, as per BLM's Surface Operating Standards for Oil and Gas Exploration and Development			
	i.	Drainage (crowning, ditching, culverts, etc.): Flat bladed for drilling operations. Crowned & ditched for production as per BLM's Surface Operating Standards for Oil and Gas Exploration and Development. Culverts will be installed at all drainages where needed.			
	j.	Cattle guards: None			

	k.	Length of new and/or existing roads which lie outside the lease or unit boundary for which a BLM right-of-way is required: None		
	1.	Other:		
	Surface addition	disturbance and vehicular travel will be limited to the approved location and access road. Any nal area needed must be approved by the Area Manager in advance.		
	If at any time the facilities located on public lands authorized by the terms of the lease are no longer included in the lease (due to a contraction in the unit or other lease or unit boundary change) the BLM will process a change in authorization to the appropriate statute. The authorization will be subject to appropriate rental, or other financial obligations determined by the authorized officer.			
	If the well is productive, the access road will be rehabilitated or brought to Resource (Class III) Road Standards within 60 days of dismantling the rig. If upgraded, the access road must be maintained at these standards until the well is properly abandoned. If this time frame cannot be met, the Area Manager will be notified so that temporary drainage control can be installed along the access road.			
3.	Location of Existing Wells -on a map, show the location of all water, injection, disposal, producing and drilling wells within a one mile radius of the proposed well, and describe the status of each <u>Tidewater &amp; Ass.'s #74-11 Tidewater, King Oil Co.'s #1 Ruby, Glen Ruby's #1 &amp; #1A Big Flat Unit and Pure Oil's #2 BFU were drilled and abandoned. See map "B" for location of wells.</u>			
4.	Location	on of Production Facilities:		
	a.	On-site facilities: If well is productive, new on-well pad facilities and lines will be submitted as "as built" under the following guide lines. Facilities will be placed in cut as much as possible. All internal combustion engines associated w/ production facilities will be equipped w/ noise reducing mufflers. Fire prevention and suppression requirements for operations on Federal lands will be followed as per BLM guidelines. If productive, anticipate treater, flare pit, separator, 2-3 production tanks, 1 water tank, and a pumping unit 2-3 years after initial production.		
	<b>b.</b>	Off-site facilities: None		
	c.	Pipelines: No permanent pipelines are anticipated between this well and existing facilities at other Kane Springs wells.		
	ermanent (in place for six months or longer) structures constructed or installed (including oil well jacks) will be painted a flat, non-reflective color to match the standard environmental colors, as nined by the Rocky Mountain Five-State Interagency Committee. All facilities will be painted within onths of installation. Facilities required by comply with the Occupational Safety and Health Act A) may be excluded. Colors will be as follows:  Match surrounding rocks, soils, vegetation.			
All site security guidelines identified in 43 CFR δ 3162.7-5 and Onshore Oil and Gas Order No. 3 sha followed.				
	If a gas meter run is constructed, it will be located on lease within 500 feet of the wellhead. The ga			

flowline will be buried from the separation equipment to the meter and will be buried downstream of the meter until it leaves the pad. Meter runs will be housed and/or fenced. The gas meter shall be calibrated prior to first sales and shall be calibrated quarterly thereafter. All gas production and measurement shall

comply with the provisions of 43 CFR  $\delta$  3162.7-3, Onshore Oil and Gas Order No. 5, and American Gas Association (AGA) Report No. 3.

If a tank battery is constructed on this lease, it will be surrounded by a berm of sufficient capacity to contain the storage capacity of the largest tank and 1 day's production. All loading lines and valves will be placed inside the berm surrounding the tank battery. All oil production and measurement shall conform to the provisions of 43 CFR  $\delta$  3162.7-3 and Onshore Oil and Gas Order No. 4.

Production facilities on location may include a lined or unlined produced water pit as specified in Onshore Order No. 7. If water is produced from the well, an Onshore Order No. 7 application must be submitted.

#### 5. Location and Type of Water Supply:

All water needed for drilling purposes will be obtained from (describe location and/or show on a map): City of Moab

A temporary water use permit for this operation will be obtained from the Utah State Engineer in Price, Utah at (801) 637-1303.

Water obtained on private land, or land administered by another agency, will require approval from the owner or agency for use of the land.

#### 6. Source of Construction Material:

Pad construction material will be obtained from (if the source is Federally owned, show location on a map):

Native on site materials for well pad.

The use of materials under BLM jurisdiction will conform to 43CFR  $\delta$  3610.2-3.

#### 7. Methods of Handling Waste Disposal:

Describe the methods and locations proposed for safe containment and disposal of waste material, e.g. cuttings, produced water, garbage, sewage, chemicals, etc.

A. Drill cuttings will be deposited in either the blooie pit or a closed loop system on location.

Cuttings from air drilling will be deposited into the blooie pit. After switching to the mud system, cuttings will be removed from location and taken to an open reserve pit at another Kane Springs

Unit well (possibly the Kane Springs Federal #7-1 if reserve pit can be easily dug).

B. Drilling fluids will be confined to closed loop system and blooie pit if necessary. At rig release, mud will be removed from location for future use.

- C. While testing the well, all produced water will be contained in a storage tank or temporary produced water pit. If well is a producer, a saltwater storage tank will be installed with the tank battery.
- D. Sewage will be either treated on-site using an approved treatment unit or disposed of according to county and state requirements in a portable chemical toilet or in a hole at least 15" deep excavated in the cut portion of the well pad.

E. Portable dumpsters or "trash trailers" will be used for all trash. All trash will be hauled offsite.

F. If a fresh water flow is encountered during the air drilling operations, the water may be used for dust control on the location and access roads, provided the following conditions are met:

1. The BLM will be notified of our intent to use the fresh water for this purpose,

2. The chlorides content of the water will be 6060 ppm or less, which is essentially equivalent to or less than 10,000 mg/1 total dissolved solids. Water with higher chlorides content may be used

	C. 1. A second with emocific prior approval of the RI M
	for dust control with specific prior approval of the BLM.  3. The water will be tested by an independent lab or mud engineer and the results of the analysis
i	will be provided to the BLM.  An apron consisting of 12 mil plastic liner material will be placed under the mud tanks. If needed, the blooie pit will be lined with a 12 mil plastic liner or a bentonite/soil mixture of 5# bentonite per square foot, mixed to a depth of 8" as specified by the BLM.
	H. After first production, produced waste water will be confined to a lined pit or storage tank for a period not to exceed 90 days. During the 90 day period, in accordance with NTL-2B, an application for approval of permanent disposal method and location, along with required water analysis, shall be submitted for the authorized officer's approval.
	The reserve pit will be located: No reserve pit is planned for this well due to the limited area available for a location.
	The reserve pit shall be located in cut material, with at least 50% of the pit volume being below original ground level. Three sides of the reserve pit will be fenced before drilling starts. The fourth side will be fenced as soon as drilling is completed, and shall remain until the pit is dry. As soon as the reserve pit has dried, all areas not needed for production will be rehabilitated.
8.	Ancillary Facilities: Two areas adjacent to the location will be needed for trailers or misc. equipment while drilling this well. One to the South of the location that would be about 50' x 100', and one to the East of the location that would be about 150' x 200'. Both of these areas have been previously disturbed by past drilling. These areas will be flagged and approved by BLM prior to any construction of the location.
9.	Well Site Layout -depict the pit, rig, cut and fill, topsoil, etc. on a plat with a scale of at least 1"=50'.
	All wells, whether drilling, producing, suspended, or abandoned, will be identified in accordance with 43 CFR $\delta$ 3162.6.
	Access to the well pad will be from: See diagram
	The blooie line will be located: NE side of well site.  , at least 100 feet from the well head.
	To minimize the amount of fugitive dust and spray escaping from the blooie pit, the following blooie line deflection method will be employed: <u>directed into length of casing and drill cuttings deflected downward.</u>
10.	Plans for Restoration of the Surface:
	The top0 inches of topsoil material will be removed from the location and stockpiled separately on Since this location is on exposed flat-rock, there is no appreciable amount of topsoil to remove.
	Topsoil along the access road will be reserved in place adjacent to the road.
	Immediately upon completion of drilling, all equipment that is not necessary for production shall be removed.  The reserve pit and that portion of the location not needed for production will be reclaimed.

Before any dirt work to restore the location takes place, the reserve pit must be completely dry.

All road surfacing will be removed prior to the rehabilitation of roads.

Reclaimed roads will have the berms and cuts reduced and will be closed to vehicle use.

All disturbed areas will be re-contoured to replicate the natural slope.

The stockpiled topsoil will be evenly distributed over the disturbed area.

Prior to reseeding, all disturbed areas, including the access roads, will be scarified and left with a rough surface.

Seed will be broadcast or drilled between October 1 and December 31, or at a time specified by the BLM. If broadcast, a harrow or some other implement will be dragged over the seeded area to assure seed coverage.

The following seed mixtu	re will be used:	(PLS) drill seeding rate
Indian rice grass	4#/Ac	
Fourwing saltbush	4#/Ac	
Galleta	4#/Ac	
Sand dropseed	1#/Ac	
Increase 50% if broado	ast	

The abandonment marker will be one of the following, as specified by BLM:

- 1) at least four feet above ground level,
- 2) at restored ground level, or
- 3) below ground level.

In any case the marker shall be inscribed with the following: operator name, lease number, well name and surveyed description (township, range, section and either quarter-quarter or footages).

	Additional requirements: Non	e
1.	Surface and Mineral Ownership:	Fed/Fed

#### 12. Other Information:

- a. Archeological Concerns: Four Corners Archeology will complete Class III inventory

  The operator is responsible for informing all persons in the area who are associated with this project that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during construction, the operator is to immediately stop work that might further disturb such materials, and contact the authorized officer (AO). Within five (5) working days, the AO will inform the operator as to:
- whether the materials appear eligible for the National Register of Historic Places;
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary); and
- a time frame for the AO to complete an expedited review under 36 CFR  $\delta$  800.11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation costs.

The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

b.	Threatened and Endangered Species Concerns: None identified by BLM
c.	Wildlife Seasonal Restrictions (yes/no): None identified by BLM. No lease stipulations.
d.	Off Location Geophysical Testing: None
e.	Drainage crossings that require additional State or Federal approval: None
f	Other: Well site orientation and VRM concerns discussed with BLM on 11/5/97.

#### 13. Lessee's or Operator's Representative and Certification

#### Representative:

Name:

**Donnie Worthington** 

Title:

Environmental/Safety/Regulatory Manager

Address:

P.O. Box 1350

Houston, TX 77251-1350

Phone No.

(713) 871-3445

#### Certification:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements make in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Aviara Energy Corporation and its contractors and subcontractors in conformity with this APD package and the terms and conditions under which it is approved. I also certify responsibility for the operations conducted on that portion of the leased lands associated with this application, with bond coverage being provided under BLM bond no. 158798586. This statement is subject to the provisions of 18 U.S.C. δ 1001 for the filing of a false statement.

Signature

Staff Petroleum Engineer

Title

Date

#### C. REQUIRED APPROVALS, REPORTS AND NOTIFICATIONS

<u>Building Location</u>-Contact the Resource Area, Natural Resource Protection Specialist at least 48 hours prior to commencing construction of location.

<u>Spud</u>- The spud date will be reported to the Resource Area Office 24 hours prior to spudding. Written notification in the form of a Sundry Notice (Form 3160-5) will be submitted to the District Office within 24 hours after spudding, regardless of whether spud was made with a dry hole digger or big rig.

<u>Daily Drilling Reports</u>- Daily drilling reports shall detail the progress and status of the well and shall be submitted to the District Office on a weekly basis.

Monthly Reports of Operations- In accordance with Onshore Oil and Gas Order No. 1, this well shall be reported on Minerals Management Service (MMS) Form 3160, "Monthly Report of Operations," starting the month in which operations commence and continuing each month until the well is physically plugged and abandoned. This report will be filed directly with MMS.

Sundry Notices- There will be no deviation from the proposed drilling and/or workover program without prior approval. "Sundry Notices and Reports on Wells" (Form 3160-5) will be filed for approval for all changes of plans and other operations in accordance with 43 CFR  $\delta$  3162.3-2. Safe drilling and operating practices must be observed.

<u>Drilling Suspensions</u>- Operations authorized by this permit shall not be suspended for more than 30 days without prior approval of the Authorized Officer. All conditions of this approval shall be applicable during any operations conducted with a replacement rig.

<u>Undesirable Events</u>- Spills, blowouts, fires, leaks, accidents, or any other unusual occurrences shall be immediately reported to the Resource Area in accordance with requirements of NTL-3A.

<u>Cultural Resources</u>- If cultural resources are discovered during construction, work that might disturb the resources is to stop, and the Area Manager is to be notified.

<u>First Production</u>- Should the well be successfully completed for production, the District Office will be notified when the well is placed in producing status. Such notification may be made by phone, but must be followed by a sundry notice or letter not later than five (5) business days following the date on which the well is placed into production.

A first production conference will be scheduled as soon as the productivity of the well is apparent. This conference should be coordinated through the Resource Area Office. The Resource Area Office shall be notified prior to the first sale.

Well Completion Report- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (Form 3160-4) will be submitted to the District Office not later than thirty (30) days after completion of the well or after completion of operations being performed, in accordance with 43 CFR  $\delta$  3162.4-1. Two copies of all logs, core descriptions, core analyses, well test data, geologic summaries, sample description, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed with Form 3160-4. When requested, samples (cuttings and/or samples) will be submitted to the District Office.

<u>Venting/Flaring of Gas</u>- Gas produced from this well may not be vented/flared beyond an initial, authorized test period of 30 days or 50 MMcf, whichever first occurs, without the prior, written approval of the District Office. Should gas be vented or flared without approval beyond the authorized test period, the well may be ordered shut-in until the gas can be captured or approval to continue the venting/flaring as uneconomical is granted. In such case, compensation to the lessor shall be required for that portion of the gas that is vented/flared without approval and which is determined to have been avoidably lost.

<u>Produced Water-</u> Produced waste water may be confined to an unlined pit for a period not to exceed 90 days after initial production. During the 90 day period, an application for approval of a permanent disposal method and location, along a water analysis, if required, will be submitted to the District Office for approval pursuant Onshore Oil and Gas Order No. 7.

Off-Lease Measurement, Storage, Commingling- Prior approval must be obtained from the District Office for off-lease measurement, off-lease storage and/or commingling (either down-hole or at the surface).

<u>Plugging and Abandonment</u>- If the well is completed as a dry hole, plugging instructions must be obtained from the District Office prior to initiating plugging operations.

A "Subsequent Report of Abandonment" (Form 3160-5) will be filed with the District Office, within thirty (30) days following plugging and abandonment of the well. This report will indicate where plugs were placed and the current status of surface restoration. Upon completion of approved plugging, a regulation marker will be erected in accordance with 43 CFR  $\delta$  3162.6. Final abandonment will not be approved until the surface reclamation work required by the approved APD or approved abandonment notice has been completed to the satisfaction of the Area Manager or his representative, or the appropriate surface managing agency.

#### TABLE 1

#### **NOTIFICATIONS**

Notify _	of the	Resource Area, at	for the following:
2 days pr	ior to commencen	nent of dirt work, construct	on or reclamation;
1 day pri	or to spudding;		
50 feet pi	rior to reaching su	urface and intermediate casi	ng depths;
3 hours p	rior to testing BO	PE;	
12 hours	prior to reaching	kickoff point depth (if appli	cable).
		number cannot be reached, if y one of the people listed	notify the Moab District Office at (801) 259 below.
newly dri Branch o	illed dry holes, ve	rbal approval can be obtain	e notice and prior approval. In the case of ed by calling the Moab District Office, val is needed after work hours, you may
Eric Jone	es, Petroleum Eng	ineer Office: (801) 25 Home: (801) 2	



#### Hunt Pegoleum Corporation

1601 Elm St., Suite 3400 Dallas, TX 75201 (214) 880-8800

# Daily Activity Report

Report Date: Tuesday, May 21, 2002

Page 1 of 2

CONFIDENTIAL

#### Weil='CANE CREEK FEDERAL #11-1' for 4/29/2002 to 5/21/2002

DAILY DRILLING REPORT

From: 4/29/2002

To: 5/21/2002

Well Name: CANE CREEK FEDERAL #11-1

AFE#: 022012D

Operator: AVIARA ENERGY CORPORATION

WI: 100.000% NRI: 0.000%

Location:

Sec/Twp/Rge:

AFEDHC: \$2,176,042

1/1 2651/9E

County: GRAND, UT

Field: KANE SPRINGS

API Code: 43-019-31364 AFECWC: \$2,176,042

AFE Type: DEV

Water Depth: 0

ft.

Proposed Depth:

9,339 ft.

Spud Date:

Rig Rel Date:

NO COST IN ADDITION TO THE BID.

**Total Depth:** 

O ft.

Activity Date: 4/29/2002

**Current Depth:** 24 Hr. Footage Made: 0 ft. 0 ft.

Days Since Spud: 0

Activity: 21 - Other

Weather:

Operations:

to - 21 - Other - 4/20/02 - START LOC PUSHING TOP SOIL AND MAKING CUTS. COST IN ADDITION TO BID PRICE WAS \$824 FOR FENCING MATERIAL & LABOR. 4/21/02 - PUSHED TOP SOIL (9.5 HRS). NO COST IN ADDITION TO THE BID. 4/22/02 - MOVED IN AIR DRLG EQUIP & STARTED DRLG. AIR DRILLER BROKE DOWN FORCING A SHUT DOWN FOR THE REST OF THE DAY. NO COST IN ADDITION TO THE BID. 4/23/02 -REPAIRED 1 AIR DRILLER & MOVED ANOTHER ON LOC. DRILLED HOLES FOR 3 1/2 HRS. NO COST IN ADDITION TO THE BID. 4/24/02 - DRLD REMAINING HOLES FOR SHOT PATTERN. NO COST IN ADDITION TO THE BID. 4/25/02 - LOADED 163 HOLES W/ DYNAMITE AND ANFO. SHOT APPROX 1403 CU YARDS. NO COST IN ADDITION TO THE BID. 4/26/02 - PUSHED ROCK & STARTED AIR DRLG HOLES FOR NEXT SHOT.

Activity Date: 4/30/2002

Cumm DHC:

Cumm DHC+Suspended:

0 ft.

Days Since Spud: 0

24 Hr. Footage Made:

**Current Depth:** 

**Current Depth:** 

**Current Depth:** 

0 ft.

Activity: 21 - Other

Weather:

to -21 - Other - PUSHED ROCK FROM FIRST SHOT PATTERN & FINISH DRLG HOLES FOR NEXT SHOT PATTERN. COST FOR FIRST SHOT 1403 CU YARDS @ \$3.85/CU YD - \$5402. PREPARING FOR NEXT SHOT

TOMORROW.

DC:

Cumm DHC:

Cumm DHC+Suspended:

0 ft.

Days Since Spud: 0

Activity Date: 5/1/2002

24 Hr. Footage Made:

Weather: Activity: 21 - Other

Operations:

to - 21 - Other - PUSHED ROCK & FIN DRLG A TOTAL OF 363 HOLES. LOAD HOLES W/ DYNAMITE & ANFRO

SHOT LOC FOR A TOTAL OF 2700 CU YARDS. COST 2700 CU YDS @ 3.85 = \$10.395.

Cumm DHC:

Cumm DHC+Suspended:

0 ft.

Activity Date: 5/2/2002

24 Hr. Footage Made:

Days Since Spud: 0

Activity: 21 - Other

Weather:

IC. UL HING ROCK LOOSENED BY BLASTING - 9.5 HRS. NO COST IN ADDITION TO BID PRICE.

Cumm DHC:

Cumm DHC+Suspended:

\$0

5/21/2002 04:16 PN DIVISION OF

OH, GAS AND MINING

# DAILY DRILLING REPORT

From: 4/29/2002 To: 5/21/2002

Well='CANE CREEK FEDERAL #11-1' for 4/29/2002 to 5/21/2002

Activity Date: 5/3/2002

**Current Depth:** 

0 ft.

Days Since Spud: 0

24 Hr. Footage Made:

0 ft.

Activity: 21 - Other

Operations:

to -21 - Other - PUSHING ROCK & TRYING TO RIP THE BLOOIE PIT. UNABLE TO RIP THE PIT AREA

PREPARING FOR AIR DRILLERS TO DRILL HOLES TO SHOOT THE SAME PIT.

DC: \$0

Cumm DHC:

Cumm DHC+Suspended: \$0

**Activity Date : 5/4/2002** 

**Current Depth:** 

0 ft.

Days Since Spud: 0

24 Hr. Footage Made:

0 ft.

Activity: 21 - Other

Weather:

to -21 - Other - GRADED LOC & DRLD SOME OF THE HOLES TO BLAST THE BLOOIE PIT & THE WTR PIT Operations:

AREA. THERE WAS NO COST INCURRED OVER THE BID COST. THE AIR DRLG FOR THE BLASTING WILL

BE CARRIED WHEN THE TOTAL YARDAGE OF THE BLAST IS DETERMINED.

Cumm DHC:

\$0

Cumm DHC+Suspended: \$0

\_\_\_\_\_\_ 0 ft.

**Activity Date: 5/14/2002** 

24 Hr. Footage Made :

Current Depth:

**Current Depth:** 

**Current Depth:** 

24 Hr. Footage Made:

0 ft.

Days Since Spud: 0

Activity: 21 - Other

Weather:

to -21 - Other - 5/10/02 - MOVE IN & RIG UP PETE MARTIN DRLG TO DRL RATHOLE, MOUSEHOLE, Operations:

CONDUCTOR & CELLAR. 5/11/02 - DRL CONDUCTOR HOLE DOWN TO 35' & START DRLG APPROX 3 1/2 FEET OF THE CELLAR. 5/12/02 - CONT TO DRL OUT 5 MORE FOOT OF CELLAR. 5/13/02 - FIN DRLG CELLAR & CONDUCTOR HOLE. DRL MOUSE HOLE. RUN 40' OF 20" CONDUCTOR PIPE. 5/14/02 - MOVE 30% RIG ON

LOCATION. 5/15/02 - MOVING IN & RIGGING UP 75% OF RIG ON LOCATION.

Cumm DHC:

Cumm DHC+Suspended: \$0

0 ft.

0 ft.

**Activity Date : 5/19/2002** 

Davs Since Spud: 0

Activity: 21 - Other

Weather:

Operations:

07:00 to 19:00 - 21 - Other - SET MOUNTAIN AIR PACKAGE. SET MI BULK TANKS. RU BACK YARD. CONTINUE TO RU TOP DRIVE. DAILY 216 MAN HRS 216 = \$9720 TOTAL MAN HRS = 852. THE TOTAL COST INCLUDED

IN THIS REPORT REFLECTS COSTS FOR ALL OF THE PREVIOUS DAYS.

Cumm DHC: DC: \$147,009

\$147,009

Cumm DHC+Suspended: \$147,009

**Activity Date:** 5/21/2002

Days Since Spud: 0

24 Hr. Footage Made:

0 ft. 0 ft.

Activity: 21 - Other

Weather:

Operations:

05:00 to 05:00 - 21 - Other - R/U & RAISE DERRICK. INSTALL 21-1/4" FLANGE & ROTATING HEAD ON 20"

CONDUCTOR. R/U MOUNTAIN AIR PACKAGE.

Cumm DHC:

\$160,073

Cumm DHC+Suspended: \$160,073



## **Hunt Fetroleum Corporation**

1601 Elm St., Suite 3400 Dallas, TX 75201 (214) 880-8800

# **Daily Activity Report**

Report Date: Tuesday, May 28, 2002

Page 1 of 3

From: 5/22/2002

CONFIDENTIAL

To: 5/28/2002

#### DAILY DRILLING REPORT

Well Name: CANE CREEK FEDERAL #11-1

Operator: AVIARA ENERGY CORPORATION

Sec/Twp/Rge:

Location:

County: GRAND, UT

Field: KANE SPRINGS

Water Depth: 0

Spud Date: 5/23/2002

Rig Rel Date:

AFE #: 022012D

WI: 100.000% NRI: 0.000%

111265 119E AFEDHC: \$2,176,042 AFECWC: \$2,176,042

AFE Type: DEV

**Proposed Depth:** 

9,339 ft.

**Total Depth:** 

0 ft.

**Casing History:** 

API Code: 43-019-31364

5/24/2002 5/25/2002

20 " 13 "

0# 54.5 # K-55

Weather:

Set at Set at

24 Hr. Footage Made:

62 ' 780 '

**Current Depth:** 

0 ft. 0 ft.

Days Since Spud:

Operations:

Activity: 21 - Other

**Activity Date:** 5/22/2002

05:00 to 05:00 - 21 - Other - RU TOP DRIVE. FOUND BAD BLOWER. REBUILD BRACKETS FOR TORQUE TRACK "T" BEAM. SET SWACO CLOSED LOOP EQUIP. RU FLOWLINE OFF OF ROTATING HEAD. NOTE:

NOTIFIED BLM - STATE OF UTAH OF SPUD TIME. TOTAL MAN HRS: 1,248 \$20,078

Cumm DHC:

\$180,151

Cumm DHC+Suspended:

\$180,151

Activity Date : 5/23/2002

Days Since Spud: 0

DC:

Activity: 21 - Other

**Current Depth:** 24 Hr. Footage Made: 40 ft. 40 ft.

Weather:

05:00 to 22:00 - 21 - Other - RU TOP DRIVE, RU FLR, FIN RU FLOW LINE. BUILD DP DRIP PANS. TURN Operations:

AROUND ALL DP SORT DP PUT OF RACKS TO PU. HOOK AIR MANIFOLD FROM FLOOR TO FLOW LINE. HOOK LINES TO FLOWLINE. READY TEST TOP DRIVE, DRAWWORKS, PUMPS & ALL RIG NABORS RIG 686

ON DAYWORK AT 2200 HRS, 05/22/02.

22:00 to 05:00 - 21 - Other - CONDUCT PRE-JOB SAFETY MTG ON P/U DRL PIPE. R/U "T & M CASERS" AND P/U

5" DRL AND STANDING BACK IN DERRICK. PROGRESS 144 JTS P/U, 48 STDS IN DERRICK.

DC: \$36,364

Cumm DHC:

\$216,515

Cumm DHC+Suspended:

\$216,515

RECEIVED

MAY 3 0 2002

DIVISION OF OIL, GAS AND MINING

From :5/2≥-**∠**002 To: 5/28/2002

Activity Date : 5/24/2002

**Current Depth:** 

410 ft.

Days Since Spud: 1

24 Hr. Footage Made:

370 ft.

Activity: 02 - Drilling

Weather:

Operations:

05:00 to 08:00 - 21 - Other - CONT P/U 5" S-135 & E-75 DRILL PIPE & STANDING BACK IN DERRICK - TOTAL 70

**STANDS** 

08:00 to 10:00 - 21 - Other - SORT DRL COLLARS & 13 3/8" CSG ON LOCATION. 10:00 to 11:00 - 21 - Other - WAIT ON DRL COLLAR SLIPS - NABORS DOWNTIME.

11:00 to 12:00 - 21 - Other - P/U 5" E-75 DRILL PIPE & STAND BACK IN DERRICK - TOTAL 80 STANDS, 7440'.

12:00 to 12:30 - 21 - Other - R/U TONG TORQUE SENSOR - NABOR DOWNTIME

12:30 to 14:30 - 21 - Other - P/U 8" & 6" DC'S - RIG DOWN "T & M CASERS" L/D MACHINE.

14:30 to 15:30 - 21 - Other - P/U 12" HAMMER TOOL, 17 1/2" HAMMER BIT - NO SPLIT MASTER ROTARY

**BUSHINGS ON LOCATION.** 

15:30 to 21:30 - 21 - Other - WAIT ON SPLIT MASTER ROTARY BUSHINGS - NABOR DOWNTIME. INSTALL TOP

STANDPIPE BRACKET - C/O SOLID BUSHING W/ SPLIT MASTER BUSHING.

21:30 to 00:00 - 02 - Drilling - AIR HAMMER DRLG F/62' - 287' 225' 90'/HR AVG. 2800 SCM / 250 PSI / MISTING @

15-20 BPH

00:00 to 02:00 - 21 - Other - POOH W/ 2 STANDS OF DP - P/U 4, 6" DC'S

02:00 to 05:00 - 02 - Drilling - AIR HAMMER DRLG F/ 287' - 410'. 123' 41'/HR AVG. 3500 SCM / 300 PSI / MISTING

15-20 BPH. NOTE: DAILY COST INCLUDES 110,000 FOR RIG MOBE.

DC: \$156.476

Cumm DHC:

\$372,991

Cumm DHC+Suspended:

\$372,991

**Activity Date:** 5/25/2002

24 Hr. Footage Made:

**Current Depth:** 

780 ft. 370 ft.

Days Since Spud: 2

Activity: 21 - Other

Weather:

Operations:

05:00 to 14:00 - 21 - Other - AIR HAMMER DRLG F/ 410' - 752', 342' 38'/HR AVG 45 RPM, 3500 SCM/300 PSI/

MISTING @ 15-20 BPH.

14:00 to 15:00 - 21 - Other - SERV RIG & TOP DRIVE.

15:00 to 15:30 - 21 - Other - AIR HAMMER DRLG F/ 752' - 780, 28' 56'/HR AVG 45 RPM, 3500 SCM/ 300 PSI/

MISTING @ 15-20 BPH.

15:30 to 16:00 - 21 - Other - SWEEP & BLOW HOLE CLEAN. 16:00 to 17:30 - 21 - Other - POOH, L/D HAMMER ASSY. 17:30 to 18:30 - 21 - Other - R/U "T & M" CASERS.

18:30 to 21:00 - 21 - Other - RUN 16 JTS OF 13 3/8" 54.5# K-55 BT&C CSG TO 749'.

21:00 to 22:00 - 21 - Other - R/D CASERS.

22:00 to 00:00 - 21 - Other - P/U TAG-IN STRINGER & TIH W/ 8 STDS & A SINGLE. STING INTO SHOE @ 749'.

00:00 to 01:00 - 21 - Other - R/U BJ & FILL 13 38" CSG W/ 96 BBLS FW.

01:00 to 03:00 - 21 - Other - CONDUCT PRE-JOB SAFETY MTG. MIX & PUMP 366 SX PREMIUM LIGHT +2% CAC12 + 0.25 #/SK CELLO FLAKE + 3#/SK KOL SEAL +8% BENTONITE + 0.5% SODIUM METASILICATE AT 12 PPG & 2.31 YLD LEAD TAIL IN W/ 200 SX "G" CMT +2% CAC12 + 0.25 #/SK CELLO FLAKE AT 15.8 PPG & 1.17 YLD - DISPLACED 8 BBLS FW. 5 BBLS ON SHOE. CIRCULATED 20 BBLS TO SURF, CMT IN PLACE @ 0225.

03:00 to 04:00 - 21 - Other - REL FROM SHOE & POOH W/ TAG-IN STRING.

04:00 to 05:00 - 21 - Other - WOC. NOTE: MR. JACK JOHNSON OF THE BLM, MOAB, UTAH OFFICE ON LOC &

WITNESSED CMT TO SURF.

DC: \$60 155

Cumm DHC:

\$433,146

Cumm DHC+Suspended:

\$433,146

From:5/22 2002 To: 5/28/2002

Activity Date: 5/26/2002

Activity: 21 - Other

**Current Depth:** 

805 ft.

Days Since Spud: 3

24 Hr. Footage Made:

25 ft.

Operations:

05:00 to 06:00 - 21 - Other - WOC.

06:00 to 10:00 - 21 - Other - CUT 20" COND & 13 3/8" SURF CSG.

10:00 to 13:00 - 21 - Other - INSTALL 13 3/8" SOW X 13 5/8" 3000# BRADEN HD "A" SECTION W/ 24" BASE PLT.

TEST WELD TO 600 PSI.

13:00 to 18:00 - 21 - Other - N/U BOPE. INSTALL & N/U 13 5/8" SPOOLS, ANN & ROTATING HD.

18:00 to 19:00 - 21 - Other - R/U SINGLE JACK TESTERS. P/U TEST JT & TEST PLUG.

19:00 to 22:00 - 21 - Other - TEST ANN & ALL RELATED BOPE TO 300 LOW & 2500 HIGH. HAD TO TIGHTEN "A"

SECTION FOR.

22:00 to 00:00 - 21 - Other - P/U 12 1/4" HAMMER BIT BHA.

00:00 to 00:30 - 21 - Other - TIH W/ 12 1/4" HAMMER ASSY. TAG CMT AT 732'.

00:30 to 01:30 - 21 - Other - INSTALL ROTATING HD ELEMENT.

01:30 to 02:00 - 21 - Other - TEST CSG TO 1900 PSI. HOLD 30 MIN. OK.

02:00 to 03:00 - 21 - Other - R/U MOUNTAIN AIR SUPPLY LINES & UNLOAD HOLE. 03:00 to 03:30 - 21 - Other - AIR DRLG CMT IN CSG F/ 732' - 754', KELLEY DOWN.

03:30 to 04:30 - 21 - Other - WIRELINE SURVEY - 3/4 DEG AT 749'.

04:30 to 05:00 - 21 - Other - AIR DRLG F/ 754' - 805' 51'. NOTE: PERFORMED TOP-OUT W/ 1" TBG TO 80'. PUMPED 7 BBLS 16 PPG CMT & CIRC 2 BBLS. CMT IN PLACE. NOTE: MR. JACK JOHNSON OF THE BLM,

MOAB, UTAH OFFICE ON LOC & WITNESSED TOP-OUT & BOP TEST.

DC: \$61,578

Cumm DHC:

\$494,724

Cumm DHC+Suspended: \$494,724

**Activity Date:** 5/27/2002

Days Since Spud: 4

.....

Current Depth: 24 Hr. Footage Made:

Current Depth:

2760 ft. 1955 ft.

Activity: 02 - Drilling

Weather:

Weather:

Operations:

05:00 to 13:30 - 02 - Drilling - AIR DRLG F/ 805 - 1579' 774' 91'/HR AVG.

13:30 to 14:00 - 21 - Other - SERV RIG & TOP DRIVE.

14:00 to 17:00 - 02 - Drilling - AIR DRLG F/ 1579' - 1730' 151' 50'/HR AVG. 17:00 to 17:30 - 21 - Other - WIRELINE SURVEY - 3/4 DEG @ 1730'. 17:30 to 22:30 - 02 - Drilling - AIR DRLG F/ 1730' - 2246' 516' 103'/HR AVG.

22:30 to 23:30 - 21 - Other - LOST WTR SUPPLY TO AIR PACKAGE, TROUBLESHOOT. PUMP LOST PRIME.

23:30 to 05:00 - 02 - Drilling - AIR DRLG F/ 2246' - 2760' 514' 94'/HR AVG.

DC: \$31,974

Cumm DHC:

\$526,698

Cumm DHC+Suspended: \$526,698

**Activity Date:** 5/28/2002

Days Since Spud: 5

24 Hr. Footage Made:

4100 ft. 1340 ft.

Activity: 02 - Drilling

Weather:

05:00 to 05:30 - 02 - Drilling - AIR DRLG F/ 2760' - 2784' 24' 50'/HR AVG. Operations:

05:30 to 06:00 - 21 - Other - WIRELINE SURV - 1 DEG @ 2720'.

06:00 to 13:00 - 02 - Drilling - AIR DRLG F/ 2784' - 3251' 467' 67'/HR AVG.

13:00 to 13:30 - 21 - Other - SERV RIG & TOP DRIVE.

13:30 to 21:30 - 02 - Drilling - AIR DRLG F/ 3251' - 3720' 469' 59'/HR AVG. 21:30 to 22:00 - 21 - Other - WIRELINE SURV - 2 1/2 DEG @ 3683'. 22:00 to 05:00 - 02 - Drilling - AIR DRLG F/ 3720' - 4100' 380' 54'/HR AVG.

DC: \$41,661

Cumm DHC:

\$568,359

Cumm DHC+Suspended: \$568,359



# Hunt Petroleum Corporation

1601 Elm St., Suite 3400 Dallas, TX 75201 (214) 880-8800

# **Daily Activity Report**

Report Date:

Monday, June 03, 2002

Page 1 of 3

CONFIDENTIAL

Well='CANE CREEK FEDERAL #11-1' for 5/29/2002 to 6/3/2002

#### DAILY DRILLING REPORT

From: 5/29/2002

To: 6/3/2002

Well Name :

**CANE CREEK FEDERAL #11-1** 

AFE#: 022012D

Operator:

WI: 0.572829 NRI 0

**AVIARA ENERGY CORPORATION** 

**Current Depth:** 

Loc:

STR: 11-265-19E

AFEDHC: \$2,176,042

County: GRAND, UT

API Code: 43-0/9-3/364

**AFECWC:** \$2,176,042

Field: KANE SPRINGS

AFE Type: DEV **Proposed Depth:** 

9339 ft.

Spud Date: 5/23/2002

Rig Rel Date:

**Total Depth:** 

0 ft.

**Activity Date:** 5/29/2002

4100 ft.

Days Since Spud: 6

24 Hr. Footage Made:

0 ft.

Activity: 21 - Other

Weather:

Operations:

05:00 to 08:30 - 02 - Drilling - AIR DRLG F/ 4100' - 4300'. 200' 57'/HR AVG - TOP OF PARADOX SALT @ 4260'

08:30 to 09:00 - 21 - Other - SWEEP HOLE - CIRC

09:00 to 09:30 - 21 - Other - WIRELINE SURVEY - 3 DEG @ 4282

09:30 to 10:00 - 21 - Other - SWEEP HOLE - CIRC

10:00 to 15:00 - 21 - Other - POOH SLM, NO CORRECTION - L/D 3 - 8" DC'S, 12" 3 POINT REAMER, HAMMER &

15:00 to 18:00 - 21 - Other - R/U "T&M" CASERS & L/D MACHINE - HELD PRE-JOB SAFETY MEETING. 18:00 to 19:30 - 02 - Drilling - RUN 20 JTS 9 5/8" 40# N-80 LT&C CSG TO 904' - FAILED HYDRAULIC HOSE.

19:30 to 20:00 - 21 - Other - REPAIR HYDRAULIC HOSE ON TONG TORQUE UNIT.

20:00 to 23:00 - 02 - Drilling - CONT RUNNING 9 5/8" 40# N-80 LT&C CASING, 95 JTS RUN TAG BTM @ 4300'

23:00 to 00:00 - 21 - Other - R/D "T&M" CASERS & L/D MACHINE

00:00 to 00:30 - 21 - Other - R/U BJ CEMENTERS

00:30 to 01:30 - 21 - Other - R/U AND PUMP 325 BBLS OF FW WITH RIG PUMPS - HELD PRE-JOB SAFETY MTG. 01:30 to 04:00 - 21 - Other - TEST LINES TO 4000#. MIX & PUMP 427 SX PREMIUM LITE II+ 3#/SK BA 90 + 3% KCL+ 0.25#/SK CF + 3#/SK KOL SEAL + 8% BENTONITE + 0.5% SODIUM METASILICATE + 13.53 GPS FW @ 12 PPG W/ 2.42 YLD. TAIL IN W/ 451 SX CLASS "G" CEMENT + 3% KCL + 0.25% CF + 0/5% FL-25 + 0.2% SODIUM METASILICATE + 5.02 GPS FW AT 15.8 PPG W/ 1.17 YLD. DISPLACE CMT W/ 316 BBLS FW, BUMP PLUG W/ 1500#, 1.5 BBLS EARLY - FLOATS HELD CMT IN PLACE AT 0400.

04:00 to 05:00 - 21 - Other - R/D BJ CEMENTERS - BREAK STACK. NOTE: NOTIFY MR. JACK JOHNSON OF THE BLM MOAB OFC OF TOP OF PARADOX SALT @ 4260'. START OFF W/4 COMPRESSORS & 1 BOOSTER AT 780'.5 COMPRESSORS & 2 BOOSTERS @ 1500' 6 COMPRESSORS & 2 BOOSTERS @ 3700' - 4300'. WORK W/ VARIOUS SOAP & WATER COMBINATIONS AS NEEDED TO CLEAN HOLE. EST RETURNS MAX 40 BPH.

DC: \$136,254

Cumm DHC:

\$704.613

Cumm DHC+Suspended:

**Activity Date:** 5/30/2002

**Current Depth:** 

24 Hr. Footage Made:

4300 ft. 200 ft.

Davs Since Spud: 7

Activity: 21 - Other

Weather:

Operations:

05:00 to 06:00 - 21 - Other - LIFT AIR STACK, SET CSG SLIPS W/ 150,000#, CUT CSG - REMOVE AIR STACK. 06:00 to 18:00 - 21 - Other - N/U 11" 5M BOPE - SET 67" SPACER SPOOL, SINGLE RAM, MUD CROSS. DOUBLE

RAM & ANNULAR. INSTALL KING WING VALVES - DSA FOR 4" HCR WING NOT ON LOC.

18:00 to 02:30 - 21 - Other - NABORS DOWNTIME - TIME LOSS FOR MISSING DSA TO BE LOCATED &

TRUCKED FROM CASPER, WY. TORQUE STACK WHILE WAITING FOR DSA.

02:30 to 05:00 - 21 - Other - R/U & RUN MULTI SHOT GYRO.

DC: \$30,773

Cumm DHC:

\$735,386

Cumm DHC+Suspended:

\$735,386

RECEIVED

JUN 0 6 **2002** 

**DIVISION OF** OIL. GAS AND MINING

6/3/2002 02:50 PM

#### DAILY DRILLING REPORT

From: 5/2972002 To: 6/3/2002

Well='CANE CREEK FEDERAL #11-1' for 5/29/2002 to 6/3/2002

**Activity Date : 5/31/2002** 

CONFIDENTIAL

**Current Depth:** 

4300 ft.

Days Since Spud: 8

24 Hr. Footage Made:

0 ft.

Activity: 21 - Other

Weather:

Operations:

05:00 to 14:00 - 21 - Other - R/U SINGLE JACK TESTERS & TEST BOPE - TEST PIPE RAMS, BLIND RAMS, KILL LINE & VLVS, HCR VLV, CHOKE LINE & VALVES, TOP DRIVE LINES VALVES & HOSES & ALL RELATED EQUIP

TO 250 LOW/5000 HIGH - TEST ANNULAR TO 250 LOW/3500 HIGH. NOTE: 3" 5M MANUAL HCR VALVE

WOULD NOT TEST, ORDER REPLACEMENT FROM NABORS, CASPER WY.

14:00 to 20:00 - 21 - Other - NABORS DOWNTIME - REMOVED FAILED 3" 5M MANUAL HCR VLV & WAIT ON REPLACEMENT. INSTALL BELL NIPPLE & TURN BUCKLES - CENTER STACK. REPLACEMENT 3" MANUAL

HCR VLV ARRIVED @ 2000 HRS.

20:00 to 22:00 - 21 - Other - INSTALL NEW 3" 5M MANUAL HCR VLV.

22:00 to 02:00 - 21 - Other - TEST TO 250 LOW/5000 HIGH - OK, TEST CSG TO 4025# OK - R/D TESTERS. 02:00 to 05:00 - 21 - Other - CENTER STACK & INSTALL DRESSER SLV ON FLOWLINE. GRIND DOWN BEAD ON GOOSENECK FOR DRESSER SLV & SLIDE ON. STILL DID NOT LINE UP - REFAB GOOSENECK. NOTE:

MR. JACK JOHNSON OF THE BLM, MOAB UTAH OFFICE ON LOC & WITNESSED BOP TEST.

DC: \$80,996

Cumm DHC:

\$816,382

Cumm DHC+Suspended:

\$816,382

Activity Date: 6/1/2002

**Current Depth:** 24 Hr. Footage Made:

4300 ft. 0 ft.

Days Since Spud: 9

Weather:

Activity: 21 - Other Operations:

05:00 to 08:30 - 21 - Other - REFAB GOOSENECK ON BELL NIP - MOVE DC'S TO RUNNING RCK.

08:30 to 10:30 - 21 - Other - P/U DIRECTIONAL BHA - M/M GRIFFITH 6/7 LOBE 5.0 STAGE SET @ 1.50 DEG. 10:30 to 13:00 - 21 - Other - REPLACE VLV ON FLOW LINE. ATTEMPTED TO TEST MWD. PUMP MOTORS

OVERHEATED & STARTER FAILED. ON #2 PUMP - TROUBLE SHOOT PUMP PROBLEMS.

13:00 to 18:00 - 21 - Other - P/U BIT, 2-MONEL FLEX XOLLARS, 9-6" DC'S & 12-5" HWDP.

18:00 to 19:30 - 21 - Other - RIG REPAIR - REPLACE HYDRAULIC LINE FOR BALE LINK TILT CYLINDER. 19:30 to 22:30 - 21 - Other - CALIBRATE SPERRY SUN DEPTH TRACKING SYS - TIH, TAG CMT @ 4198'. 22:30 to 23:00 - 21 - Other - ATTEMPT TO DISPL W/ 10.2 PPG OBM - LEAKS ON PUMP SUCTION LINES. 23:00 to 03:00 - 21 - Other - REPAIR LEAKS ON PUMP SUCTION LINES - MUD TRANSFER PUMP FAILED -INSTALL STANDBY PUMP. STANDBY PUMP HAD TORN ELECTRICAL CABLE - WAIT ON ELECTRICIAN -

SPLICE & REPAIR SAME.

03:00 to 04:00 - 21 - Other - DISPL HOLE W/ 10.2 PPG OBM.

Cumm DHC:

04:00 to 05:00 - 21 - Other - CLEARING MUD PITS OF WTR & TRANSFER OBM TO RIG PITS FOR VOLUME.

\$902.129

Cumm DHC+Suspended:

Weather:

**Activity Date : 6/2/2002** 

**Current Depth:** 

4580 ft.

Days Since Spud: 10

24 Hr. Footage Made:

280 ft.

Operations:

Activity: 02 - Drilling

05:00 to 06:00 - 21 - Other - CLEARING MUD PITS OF WTR & TRANSFER OBM TO RIG PITS FOR VOLUME

06:00 to 07:00 - 21 - Other - RIG REPAIR - #2 PUMP

07:00 to 09:30 - 02 - Drilling - ROTARY DRLG CMT F/ 4198' - 4280', 82' 33'/HR.

09:30 to 10:00 - 21 - Other - TEST CSG W/RIG PUMP TO 2900# - OK

10:00 to 10:30 - 21 - Other - SVC RIG & TOP DRIVE.

10:30 to 11:30 - 21 - Other - RIG REPAIR - TOP DRIVE BRAKE.

11:30 to 12:00 - 21 - Other - ROTARY DRLG F/ 4280' - 4310' 30' 60'/HR.

12:00 to 12:30 - 21 - Other - TEST CSG SHOE FIT W/ RIG PUMP TO 1540# OR 17 PPG EMW - OK.

12:30 to 14:00 - 02 - Drilling - ROTARY DRLG F/ 4310' TO 4388', 78' 52'/HR.

14:00 to 14:30 - 21 - Other - RIG REPAIR - TOP DRIVE BRAKE.

14:30 to 15:00 - 02 - Drilling - ROTARY DRLG F/ 4388' TO 4395' 7' - PUMP CAVITATING.

15:00 to 21:00 - 21 - Other - RIG REPAIR - GO THRU PUMPS - FOUND PUMPDOWN PLUG RUBBER IN VALVES. CLEAR FROM PUMP - ATTEMPT TO DRILL, PUMP CONT TO CAVITATE - R/U & CIRC MUD SYSTEM ACRODD

SHAKERS.

21:00 to 22:00 - 02 - Drilling - ROTARY DRILL F/4395' TO 4412', 17' - PUMP CAVITATING.

22:00 to 00:30 - 21 - Other - RIG REPAIR - GO THRU PUMPS - AGAIN FOUND PUMPDOWN PLUG RUBBER IN

VALAVES. CLEAR FROM PUMP.

00:30 to 05:00 - 02 - Drilling - ROTARY DRLG F/ 4412' TO 4580', 168' 38'/HR.

DC: \$42.244

Cumm DHC:

\$944,373

Cumm DHC+Suspended:

\$944,373

# DAILY DRILLING REPOR

From: 5/29 ±002 To: 6/3/2002

Well='CANE CREEK FEDERAL #11-1' for 5/29/2002 to 6/3/2002

Activity Date: 6/3/2002

**Current Depth:** 

5140 ft.

Days Since Spud: 11

24 Hr. Footage Made:

560 ft.

Activity: 02 - Drilling

Operations:

05:00 to 05:30 - 02 - Drilling - SLIDE DRLG @ 190M F/ 4580' - 4590', 5' 10'/HR. 05:30 to 10:00 - 02 - Drilling - ROTARY DRLG F/ 4590' - 4669', 79' 18'/HR.

10:00 to 11:00 - 02 - Drilling - SLIDE DRLG @ 200M F/ 4669 - 4694', 25' 25'/HR. 11:00 to 12:00 - 02 - Drilling - ROTARY DRLG F/ 4694' - 4730', 36' 36'/HR.

12:00 to 13:00 - 02 - Drilling - SLIDE DRLG @ 180M F/ 4730' - 4745', 15' 30'/HR. 13:00 to 13:30 - 02 - Drilling - ROTARY DRLG F/ 4745' - 4763', 18' 36'/HR. 13:30 to 14:00 - 02 - Drilling - SLIDE DRLG @ 180M F/ 4763' - 4783', 20' 40'/HR.

14:00 to 15:30 - 02 - Drilling - ROTARY DRLG F/ 4783' - 4857', 74' 49'/HR.

15:30 to 18:00 - 21 - Other - RIG REPAIR - GO THRU PUMPS - AGAIN FOUND CUTTINGS IN VALVES. CLEAR

FROM PUMP.

18:00 to 19:00 - 02 - Drilling - ROTARY DRLG F/ 4857' - 4916', 59' 59'/HR.

19:00 to 22:00 - 21 - Other - RIG REPAIR - GO THRU PUMPS - AGAIN FOUND CUTTINGS IN VALVES. CLEAR

FROM PUMP.

22:00 to 23:00 - 02 - Drilling - ROTARY DRLG F/ 4916' - 4952', 36' 36'/HR. 23:00 to 23:30 - 02 - Drilling - SLIDE DRLG @ 180M F/ 4952' - 4972', 20' 40'/HR. 23:30 to 00:00 - 02 - Drilling - ROTARY DRLG F/ 4972' - 4982', 10' 20'/HR. 00:00 to 01:30 - 02 - Drilling - SLIDE DRLG @ 200M F/ 4982' - 4997', 15' 10'/HR. 01:30 to 02:00 - 02 - Drilling - ROTARY DRLG F/ 4997' - 5014', 17' 34'/HR. 02:00 to 02:30 - 02 - Drilling - SLIDE DRLG @ 200M F/ 5014' - 5033', 19' 38'/HR. 02:30 to 05:00 - 02 - Drilling - ROTARY DRLG F/ 5033' - 5140', 107' 43'/HR

DC: \$54,130

Cumm DHC: .....

\$998,503

Cumm DHC+Suspended:

CONFIDENTIAL

# RECEIVED

JUN 10 2002

# STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

DIVISION ( OIL, GAS AND	OF MINING		ENTITY ACTIO	ON FORM
OIL, GAS FORD				
Operator:	Aviara	Energy	Corporation	Operator

Address: P. 0. Box 1350

P. U. BOX 1350

city Houston

<u>state TX zip 77251-1350</u>

Operator Account Number: N - 5500

Phone Number: 713-871-3400

Well 1

Action Code Current Entity New Entity Spud Date Entity Assignment Number Number Effective Date	
	ient ie

Well 2

API Number	Well	Name	CO	Sgo		Ring	County
43-019-31364	Cane Creek Fede	ral #11-1	SE NW	11	26S	19E	Grand
Action Code	Current Entity Number	New Entity Number	5	pud Da	te		tity Assignment Effective Date
B ***	99999	13477	5-2	5-23-02		<del>-5-6-0</del> 2 6-10-0	
Commontos							

Comments:

Well drilled in the Cane Creek Unit. Agreement No. UTU80000X

API Number	Well	Name	QQ Sec Twp	Rng Gounty
Action Code	Current Entity Number	New Entity Number	Spud Date	Entity Assignment Effective Date

#### **ACTION CODES:**

- A Establish new entity for new well (single well only)
- B Add new well to existing entity (group or unit well)
- C Re-assign well from one existing entity to another existing entity
- D Re-assign well from one existing entity to a new entity
- E Other (Explain in 'comments' section)

Victoria Guidry	1
-----------------	---

Name (Please Print)

Signatur

Prod/Regulatory Coord

6/5/02

Title

Date



#### **Hunt Petroleum Corporation**

STR: // -265-19E

API Code: 43-019-31364

1601 Elm St., Suite 3400 Dallas, TX 75201 (214) 880-8800

# **Daily Activity Report**

Report Date : Monday, June 17, 2002

AFE #: 022012D

AFEDHC: \$2,176,042

AFECWC: \$2,176,042

AFE Type: DEV

**Proposed Depth:** 

Weather:

Total Depth:

WI: 0.572829 NRI 0

**Current Depth:** 

24 Hr. Footage Made:

9339 ft.

0 ft.

Page 1 of 3

From: 6/12/2002

CONFIDENTIAL

To: 6/17/2002

6564 ft.

0 ft.

Well='CANE CREEK FEDERAL #11-1' for 6/12/2002 to 6/17/2002

#### DAILY DRILLING REPORT

**CANE CREEK FEDERAL #11-1** 

Operator : AVIARA ENERGY CORPORATION

Loc:

County: GRAND, UT

Field: KANE SPRINGS

Spud Date: 5/23/2002

Rig Rel Date:

Activity: 21 - Other

Activity Date: 6/12/2002

Operations:

Days Since Spud: 20

05:00 to 09:00 - 21 - Other - MONITOR WELL PRESSURES - MAX SICP 960, SIDPP 80. 09:00 to 11:30 - 21 - Other - DISPL WELL @ 4300' FROM VERADRIL OIL MUD TO 16 PPG SATURATED SODIUM

CHLORIDE MUD. RECOVERED 260 BBLS OF CONTAMINATED OBM. LOST +/- 41 BBLS TO HOLE DURING

DISPLACEMENT. 11:30 to 13:00 - 21 - Other - MONITOR WELL PRESSURES - MAX SICP 340, SIDPP 90. 13:00 to 14:30 - 21 - Other - CIRC & COND MUD @ 4300' W/ 16 PPG SATURATED SODIUM CHLORIDE MUD -RETURNS F/ 14 TO 16 PPG. UNABLE TO KEEP MIXING PUMP RUNNING, THROWING BREAKER FROM

OVERHEATING. MW @ 15.7 PPG - SHUT DOWN. 14:30 to 02:00 - 21 - Other - MONITOR WELL PRESSURES - MAX SICP 480, SIDPP 100 - WAIT ON 10# BRINE TO TREAT DEHYDRATED MUD. 02:00 to 03:00 - 21 - Other - STRIP 6 STANDS IN HOLE TO 4850' HOLDING 300 PSI ON CSG.

03:00 to 04:00 - 21 - Other - CIRC, HOLE GETTING GOOD RETURNS W/ 100 PSI DP & 100 PSI ON CSG. THRYING TO PUMP LOST CIRC PILL W/ #1 PUMP COULD NOT SWITCH TO #2 PUMP. 04:00 to 05:00 - 21 - Other - PUMP LOST CIRC MATERIAL W/ #2 PUMP. PUMP PRESSURE INCR TO 600 PSI ON

DP & 100 ON CSG. HAD STEADY INCR IN DP 600 PSI TO 780 PSI WHILE HOLDING 300 PSI ON CSG. 15.5 PPG COMING OUT & 16 PPG GOING IN. DC: \$50,130

**Activity Date:** 6/13/2002

Days Since Spud: 21

Activity: 21 - Other Operations:

09:30 to 15:30 - 21 - Other - MUD WT DROPPED TO 15.5 PPG CIRC HOLE WHILE INCR MUD WT TO 16 PPG. 15:30 to 16:30 - 21 - Other - SRIP IN HOLE F/ 5558' & TOOK WT @ 6376'. 16:30 to 18:30 - 21 - Other - CIRC @ 6376' W/ 16 PPG MUD & CHECK WELL FOR FLOW, WELL FLOWING, CIRC

18:30 to 00:00 - 21 - Other - SHUT WELL IN 280 PSI ON DP & 100 ON CSG. WAIT TO SEE WHAT CAN BE DONE TO SAVE THE MUD. 00:00 to 01:30 - 21 - Other - ADD THINNER TO MUD & RUN TEST ON MUD PROPERTIES. WORKING ON CIRC PUMPS (SIDPP-20, SICP-0)

03:00 to 05:00 - 21 - Other - CIRC BTMS UP & START TO WASH BTM 6376' - 6550'. DC: \$50,775

Cumm DHC:

01:30 to 03:00 - 21 - Other - ADD THINNER TO MUD, CIRC & COND.

Cumm DHC:

08:30 to 09:00 - 21 - Other - SRIP IN HOLE F/ 4842 - 5558'. 09:00 to 09:30 - 21 - Other - CIRC @ 5558' W/ 16 PPG MUD.

05:00 to 08:30 - 21 - Other - MONITOR WELL & RAISING MUD WT TO 16 PPG.

\$1,545,672

ON CHOKE. STARTED GETTING BACK THICK MUD, WT 14.5 PPG & GAS PEAKED @ 2800 UNITS.

\$1,494,897

Weather:

Cumm DHC+Suspended:

Cumm DHC+Suspended:

**Current Depth:** 

24 Hr. Footage Made:

\$1.545.672

\$1,494,897

6564 ft. 0 ft.

HIN 19 2002

**DIVISION OF** OIL, GAS AND MINING CONFIDENTIAL

From: 6/12/2002 To: 6/17/2002

Well='CANE CREEK FEDERAL #11-1' for 6/12/2002 to 6/17/2002

**Activity Date: 6/14/2002** 

**Current Depth:** 

7076 ft.

Days Since Spud: 22

24 Hr. Footage Made:

512 ff

Activity: 21 - Other

Operations:

05:00 to 05:30 - 21 - Other - CIRC BTMS UP & START TO WASH TO BTM F/ 6550' - 6564'.

05:30 to 08:00 - 02 - Drilling - ROTARY DRLG F/ 6564' - 6645', 81' 33'/HR.

08:00 to 08:30 - 21 - Other - MWD SURVEY & CONNECTION - 6591' 0.11 DEG 313.81 AZ.

08:30 to 10:00 - 21 - Other - RIG REPAIR - PUMP CAVIATING, GO THROUGH FLUID END, CLEARED DEBRIS.

10:00 to 16:30 - 02 - Drilling - ROTARY DRLG F/ 6645' - 6831', 186' 29'/HR.

16:30 to 17:30 - 21 - Other - SVC RIG & TOP DRIVE.

17:30 to 22:30 - 02 - Drilling - ROTARY DRLG F/ 6831' - 7050', 219' 43.8'/HR.

22:30 to 23:00 - 02 - Drilling - SLIDE DRLG F/ 7050' - 7054', 4' 8'/HR.

23:00 to 23:30 - 21 - Other - WORK ON #1 PUMP.

23:30 to 00:30 - 02 - Drilling - SLIDE DRLG F/ 7054' - 7071', 17' 17'/HR.

00:30 to 01:00 - 02 - Drilling - ROTARY DRLG F/ 7071' - 7076', 5' 10'/HR (KICK OFF POINT).

01:00 to 02:30 - 21 - Other - CIRC BTMS UP. 02:30 to 03:00 - 21 - Other - PUMP SLUG.

03:00 to 04:00 - 21 - Other - BUILD ANOTHER SLUG & PUMP. 04:00 to 05:00 - 21 - Other - POOH TO LOG & CHANGE OUT BHA.

DC: \$40.242

Cumm DHC:

\$1,585,914

Cumm DHC+Suspended: \$1,585,914

24 Hr. Footage Made :

**Activity Date: 6/15/2002** 

.....

Current Depth: 7076 ft.

0 ft.

Days Since Spud: 23

Activity: 21 - Other

Weather:

Operations:

05:00 to 06:00 - 21 - Other - RU MUD BUCKET, SLUG DID NOT WORK. 06:00 to 08:30 - 21 - Other - POOH TO CHANGE OUT BHA & LOG. 08:30 to 09:30 - 21 - Other - RPR TOP DRIVE VALVE ON ARMS 09:30 to 11:00 - 21 - Other - POOH TO CHANGE OUT BHA & LOG.

11:00 to 12:00 - 21 - Other - LAY DOWN BIT, MWD & MOTOR.

12:00 to 18:00 - 21 - Other - RU SCHLUMBR ELEC LINE & RUN INDUCTION/SONIC/GR/CALIPER LOG F/ 7076' T/

4300'. RD SCHLUMBGR.

18:00 to 20:30 - 21 - Other - CHANGE LINERS & SWAB IN THE #2 PUMP FROM 6 INCH TO 4 1/2 INCH.

20:30 to 23:00 - 21 - Other - PU BHA & TEST MOTOR & MWD.

23:00 to 01:00 - 21 - Other - WORK ON AIR CLUTCH & AIR STARTER ON FLR MTR.

01:00 to 03:30 - 21 - Other - TIH & BREAK CIRC @ 4300'.

03:30 to 04:30 - 21 - Other - TIH.

04:30 to 05:00 - 21 - Other - WORK ON RIG THE DYOMATIC LOCKED UP.

Cumm DHC:

\$1,656,393

Cumm DHC+Suspended: \$1,656,393

**Activity Date:** 6/16/2002

DC: \$70,479

Current Depth:

24 Hr. Footage Made :

7076 ft. 0 ft.

Days Since Spud: 24

Activity: 21 - Other

Operations:

05:00 to 06:00 - 21 - Other - WORKING ON THE RIG DYOMATIC SYS.

06:00 to 07:00 - 21 - Other - PUMP TO CK MWD DID NOT RECEIVE SIGNAL

07:00 to 11:00 - 21 - Other - POOH TO CK MWD & FOUND 284' OF BHA MISSING.

11:00 to 15:30 - 21 - Other - TIH & TAG TOP OF FISH AT 6792'. SCREW INTO FISH HAD INCR IN PUMP PRESS &

TORQUE.

15:30 to 16:00 - 21 - Other - POOH.

16:00 to 17:00 - 21 - Other - HAD TROUBLE BREAK TOP DRIVE CONN F/ DRL PIPE BUT FINALLY BROKE FREE. 17:00 to 17:30 - 21 - Other - HOLD JSA ON RIGGING UP SPINNING CHAIN DUE TO SPINNER HAWKS WOULD

NOT SPIN PIPE.

17:30 to 23:00 - 21 - Other - POOH W/ FISH.

23:00 to 00:30 - 21 - Other - BREAK OUT MWD, BIT & MTR.

00:30 to 01:30 - 21 - Other - INSPECT FLOAT SUB, HANG OFF SUB & BIT.

01:30 to 02:00 - 21 - Other - PICK UP NEW MTR.

02:00 to 03:30 - 21 - Other - INSPECT MONELS & INSTALL MWD.

03:30 to 04:30 - 21 - Other - INSPECT DRL PIPE.

04:30 to 05:00 - 21 - Other - LAY DOWN 2 DAMAGE JTS OF DRL PIPE & PICK UP 2 NEW JTS.

DC: \$31,604

\$31,604 Cumm DHC: \$1,687,997

JUN 19 2002

# DAILY DRILLING REPORT

From: 6/12/2002 To: 6/17/2002

Well='CANE CREEK FEDERAL #11-1' for 6/12/2002 to 6/17/2002

**Activity Date:** 6/17/2002

**Current Depth:** 

7175 ft.

24 Hr. Footage Made:

99 ft.

Days Since Spud: 25

Activity: 02 - Drilling

Weather:

Operations:

05:00 to 11:00 - 21 - Other - TIH; BREAK CIRC AT BTM OF CSG & AT 6000'.

11:00 to 11:30 - 21 - Other - ON BTM BREAK CIRC & CIRC HOLE. 11:30 to 12:00 - 21 - Other - ROTATE F/7076 - 7078' & SURVEY.

12:00 to 15:00 - 21 - Other - HAVING PUMP TROUBLE (LOOSING PUMP PRESS).

15:00 to 18:00 - 21 - Other - CLEAN OUT SUCTION PIT, A LOT OF BARITE AROUND SUCTION LINE TO PUMPS.

18:00 to 18:30 - 21 - Other - RUNNING PUMPS HOLDING PRESSURE. 18:30 to 20:00 - 02 - Drilling - SLIDE DRL F/7078 - 7087' 9' @ 6' HR. 20:00 to 22:00 - 21 - Other - WORKING ON POP OFF VALVE TO #1 PUMP. 22:00 to 01:30 - 02 - Drilling - SLIDE DRL F/7087 - 7109' 22' @ 6' HR. 01:30 to 02:00 - 02 - Drilling - ROTARY DRL 7109 - 7113' 4' @ 8' HR. 02:00 to 03:30 - 02 - Drilling - SLIDE DRL 7113 - 7141' 28' @ 18.6' HR. 03:30 to 04:00 - 02 - Drilling - ROTARY DRL 7141 - 7149' 8' @ 16' HR. 04:00 to 05:00 - 02 - Drilling - SLIDE DRL 7149 - 7175' 26' @ 26' HR.

DC: \$42.037

Cumm DHC:

\$1,730,034

Cumm DHC+Suspended: \$1,730,034

RECEIVED

JUN 19 2002

**DIVISION OF** OIL GAS AND MINING



# **Daily Activity Report**

Report Date: Sday, July 16, 2002

Page 1 of 2

CONFIDENTIAL

Well='CANE CREEK FEDERAL #11-1' for 7/13/2002 to 7/16/2002

DAILY COMPLETION / WELLWORK REPORT

From: 7/13/2002

To:7/16/2002

Well='CANE CREEK FEDERAL #11-1' for 7/13/2002 to 7/16/2002

Well Name: CANE CREEK FEDERAL #11-1

Job Start Date: 7/13/2002

Operator: HUNT PETROLEUM (AEC), INC.

AFE#: 022012C

Loc:

STR: 11 -265 -19E

WI: 0.57283 NRI 0

County: GRAND, UT

**Spud Date:** 5/23/2002

API Code: 43 019 31364

AFEDHC: \$0

Field: KANE SPRINGS Contractor:

AFECWC: \$269,001

AFE Type: CMD

Depth:

O ft.

Comp Date:

**Turn To Completion Date: Date First Production:** 

PBTD:

0 ft.

Job Purpose: COMPLETE WELL

Date: 7/13/2002

Activity: Completion

Days On Completion: 1

Remarks: GIH W/ BIT & SCRAPPER TO 7650' - NO RTNS AFTER 8 BBLS DISPLACEMENT. COND MUD IN SLUG PIT TO 16.5 - FILL HOLE W/ 4.5 BBLS MUD - HOLE TOOK DRINK OF 41.5 BBLS TOTAL ON TRIP. R/U TO L/D 4" DP - R/U L/D MACHINE. POOH L/D DP. WORKING ON RIG PIPE SPINNERS. L/D DP - L/D BIT & SCRAPPER. TIH W/ 45 STDS DP OUT OF DERRICK. FIN L/D 4" DP. OFFLOAD 2 7/8" TBG TO RACK -STRAP SAME - R/U TO RUN 27/8" TBG. P/U PERF JT 27/8" W/ BULL PLUG ON BTM & GIH P/U 27/8",

6.5#, L-80, 8RD, TBG OFF RACK.

DC: \$22.155

CCC:

\$22,155

CWC: \$22,155

Date: 7/14/2002

Activity: Completion

Days On Completion: 2

Remarks: RUNNING 27/8 TBG. OFFLOAD LOAD OF 27/8" TBG TO RACK - STRAP SAME - REMOVE THREAD PROTECTORS - R/U TO RUN 1/2" CAPILLARY TBG. M/U PKR, PUP JT - M/U 1/2" CAPILLARY TBG TO PKR - M/U JET PUMP ASSY - GIH P/U 2 7/8" TBG OFF RACK & BANDING 1/2" LINE TO 2 7/8" TBG.

DC: \$26,309

CCC:

\$48,464

CWC:

RECEIVED

JUL 2 2 2002

DIVISION OF OIL, GAS AND MINING

#### DAILY COMPLETION / WELLWORK REPORT

Well='CANE CREEK FEDERAL #11-1' for 77-3/2002 to 7/16/2002

Date: 7/15/2002

**Activity:** Completion

Davs On Completion:

From: 7/13/2002

To: 7/16/2002

Remarks: FIN RUN 2 7/8" COMP STR - 70 JTS 2 7/8" TBG (2306.87), 7" HALLIBR AHR PKR (5.72'), 2 7/8" PUP JT (8.00), WEATHERFORD JET PUMP ASSY (10.45'), 228 JTS 2 7/8" TBG (7498.61), ELEVATION (24.80). M/U TBG HGR - BAND & ATTACH 1/2" CAPILLARY TUBE TO SAME - SLACK OFF TO LAND & TBG HGR WOULD NOT GO THRU ROTATING HD. BPV INSTALLED IN TBG HGR. NPL DOWN ROTATING HD & 7" SPOOL. LAND TBG HGR IN SPOOL - RUN IN HOLD DOWN STUDS. NPL DOWN BOP STACK. NPL UP 6650# TREE - TEST SAME TO 6650# - PULL BPV. R/U BJ TO TREE- R/U LINES FROM TBG SPOOL TO CHOKE MANIFOLD. TEST LINES TO 6000# - PUMP 15 BBLS DIESEL, 25 BBLS SWEEP, 70 BBLS LEASE WTR & OBTAINED RTNS. PUMP 50 BBLS SWEEP. 25 BBLS SWEEP - START PUMPING LEASE WTR & DISPLACING OIL MUD FROM HOLE @ 2 BPM RATE - WITH 215 BBLS LEASE WTR PUMPED & 300 BBLS MUD RTNS, WELL LOST RTNS - PUMPING DOWN TBG AFTER LOSS W/ INCREASED RATE OF 3 BPM @ 3100# - INCREASED RATE TO 4 BPM @ 3650# W/ TRACE OF RTNS @ SHAKER. SET AHR PKR WHILE PUMPING ON WELL TO KEEP ANNULUS FULL - PRESS UP ON 1/2" TO 3600# FOR 5 MIN, 4300# FOR 3 MIN (LOST 500#, PUMP BACK UP, PRESS HELD), 6000# FOR 2 MIN, 7300# & PRESS FELL OFF TO 1200# & WOULD NOT BLEED OFF - R/U BJ & TEST BACKSIDE TO 4000# PKR TESTED BUT 1/2" TBG EQUALIZED TO 4000# - 1/2" TBG BUSTED DEEP IN WELL BASED ON 1200# HYDROSTATIC PRESS DIFFERENTIAL BETWEEN FRESH WTR & SALT WTR IN TBG PUMPED 200 BBLS LEASE WTR DOWN TBG WHILE TESTING. R/D BJ - OBSERVE WELL 2600# SITP - R/U TO FLOW WELL INTO FRAC TANK. FLOW WELL INTO FRAC TANK - RECOVERED 300 BBLS TOTAT FLUID - WELL PRODUCING LARGE AMOUNT OF GAS - OPEN WELL TO GAS BUSTER ON 14/64 CHOKE, 2900# W/ 15' FLARE @ 3/4 BPM OR 1100 BPD RATE - WIND CONDITIONS WOULD NOT ALLOW TO FLARE. SHUT WELL IN 3200# SITP -CHANGED TO 10/64 CHOKE 3200# - FLARE STILL TO LARGE FOR WIND CONDITIONS. 0400 - 0500 1.0 START CLEANING RIG FOR RELEASE.

DC: \$101,977

CCC:

\$150,441

CWC: \$150,441

Date: 7/16/2002

Activity: Completion

Days On Completion:

Remarks: LOAD & RTN ALL 4" DP & TOOLS, BOP EQUIP. WEATHERFORD MAN ON LOC TO VERIFY ALL TOOLS P/U. TRUCKS ON LOC TO HAUL ALL BULK BARITE FROM TANKS. TRUCKS HAULING MUD CHEMICALS AWAY. TRANSFER ALL GOOD MUD TO FRAC TANKS, CLEANING OUT BTMS & SHALE PITS W/ SUPER SUCKER. TRANSFER ALL CSG & TBG TO 34-1 LOC FOR STORAGE. R/D & RTN ROTATING HD TO SMITH. MOVE NABORS CHOKE HOUSE TO 34-1 LOC FOR STORAGE & GIVE PROD ROOM TO START OPERATIONS. HAULING FLOW BACK FLUID TO DISPOSAL. STEAM CLEANING RIG & SUBSTRUCTURE. R/D & CLEAN SWACO HI SPEED SHAKER FOR LOAD OUT. MOVE NABORS DP & DCS TO 34-1 FOR STORAGE & ROOM. REMOVE SWACO CHOKE FROM CHOKE MANIFOLD. RTN MANIFOLD TO WEATHERFORD. SENT PDC BITS OWNED BY AVIARA TO SMITH IN VERNAL FOR STORAGE IN OUR INVENTORY. BREAK BROKEN DRAIN VALVE ON GAS BUSTER & DRAIN MUD OUT

OF SAME.

DC: \$25,554

CCC:

\$175,995

CWC: \$175,995

RECEIVED

JUL 2 2 2002



# Hunt Petroleum Corporation

1601 Elm St., Suite 3400 Dallas, TX 75201 (214) 880-8800

# **Daily Activity Report**

Report Date:

Tuesday, July 16, 2002

Page 1 of 2

CONFIDENTIAL

Well='CANE CREEK FEDERAL #11-1' for 7/10/2002 to 7/12/2002

DAILY DRILLING REPORT

From: 7/10/2002

To: 7/12/2002

Well Name : **CANE CREEK FEDERAL #11-1**  AFE#: 022012D

WI: 0.572829 NRI

Operator: HUNT PETROLEUM (AEC), INC.

Loc:

STR: 11 -265-19E

AFEDHC: \$2,175,991

County: GRAND, UT

API Code: 43 019 31364

AFECWC: \$2,175,991

Field:

KANE SPRINGS

AFE Type: DEV **Proposed Depth:** 

9339 ft.

**Current Depth:** 

Spud Date: 5/23/2002

Rig Rel Date:

Total Depth:

0 ft.

**Activity Date: 7/10/2002** 

9777 ft.

Days Since Spud: 48

92 ft.

Activity: 21 - Other

Weather:

24 Hr. Footage Made:

Operations:

05:00 to 06:00 - 21 - Other - WORKING ON TOP DRIVE CONTROL PANEL.

06:00 to 08:30 - 02 - Drilling - SLIDE DRLG F/ 9685 - 9698 @ 80R 200 GPM @ 3500#. 08:30 to 09:30 - 02 - Drilling - ROT DRLG F/ 9698 - 9701 200 GPM @ 4000# ON BTM.

09:30 to 11:00 - 21 - Other - SURVEY & WOO.

11:00 to 11:30 - 21 - Other - SERVICE RIG & TOP DRIVE.

11:30 to 12:00 - 21 - Other - WOO

12:00 to 21:00 - 02 - Drilling - ROT DRLG F/ 9701 - 9777 200 GPM @ 4000# ON BTM. 1 CHOKE FULL OPEN - 400#

SICP - MWD WENT OUT IN ROTATIONAL MODE @ 9746.

21:00 to 21:30 - 21 - Other - ATTEMPTING TO RE-LOG LAST 30' DRLD. AFTER LOGGING 20' IN NON

ROTATIONAL MODE, MWD WENT DEAD. RECYCLING PUMPS & CHECKING SURFACE EQUIP. UNABLE TO

BRING MWD BACK TO LIFE.

21:30 to 23:30 - 21 - Other - CIRC HOLE CLEAN. PREPARING FOR TRIP. TRANSFER 40 BBLS KILL MUD TO

SLUG PIT TO WEIGH SAME. 16.6#/GAL.

23:30 to 02:00 - 21 - Other - STRIP OOH WET W/ 22 STDS DP TO BTM OF CSG SICP 350#.

02:00 to 04:30 - 21 - Other - TRANSFERING 300 BBLS MUD OUT OF ACTIVE SYS TO MAKE ROOM FOR

PUMPING KILL MUD. START TRANSFER OF KILL MUD TO SLUG PIT FROM UPRIGHT FRAC TANK. KILL MUD TANK EMPTY AFTER 80 BBLS. HAVING TO ISOLATE SUCTION PIT. PIT & WEIGH SAME UP TO 16.5 - SICP

STILL 350#.

04:30 to 05:00 - 21 - Other - CIRC KILL MUD TO KILL WELL.

DC: \$55,600

Cumm DHC:

\$3,120,012

Cumm DHC+Suspended:

\$3,120,012



#### DAILY DRILLING REPORY

From:7/10-2002 To: 7/12/2002

Well='CANE CREEK FEDERAL #11-1' for 7/10/2002 to 7/12/2002

**Activity Date: 7/11/2002** 

**Current Depth:** 

9820 ft.

Days Since Spud: 49

24 Hr. Footage Made:

43 ft.

Activity: 02 - Drilling

Weather:

Operations:

05:00 to 06:30 - 21 - Other - CIRC 16.5 & 17.8 KILL MUD AROUND - 0 PSI - WELL PEEING DUE TO SLOW **FALLING MUD.** 

06:30 to 08:30 - 21 - Other - OBSERVE WELL & BUILD 19.0 #/GAL SLUG - PUMP SAME.

08:30 to 12:30 - 21 - Other - POOH W/ SET STR - L/D MWD ROTATOR - 4 OF 6 JETS PLUGGED - BEARING ASSY

ON MTR VERY HARD TO TURN - L/D MM - HAD TIGHT SPOT @ 7855 WHILE POOH.

12:30 to 16:00 - 21 - Other - P/U NEW MM - SET SAME TO 1.5 DEG - INSTALL MWD TOOL - ORIENT & SURFACE

TEST ALL TOOLS - M/U RR BIT #7 - RIH P/U STD DP - INSTALL ROTATING HD.

16:00 to 16:30 - 21 - Other - SERV RIG & TOP DRIVE.

16:30 to 20:00 - 21 - Other - GIH TO BTM OF CSG FILLING DP EVERY 30 STDS.

20:00 to 21:30 - 21 - Other - CIRC OUT KILL MUD - 250# ON CSG.

21:30 to 22:00 - 21 - Other - START IN HOLE - UNABLE TO GO THRU TIGHT SPOT @ 7851 - WASH THRU TIGHT

SPOT FROM 7851 - 7882.

22:00 to 23:00 - 21 - Other - FIN TIH TO 9777 - HOLE SLICK IN THIS AREA. 23:00 to 00:00 - 21 - Other - FILL PIPE - BREAK CIRC - ORIENT TOOLS.

00:00 to 02:00 - 02 - Drilling - SLD DRLG F/9777 - 9792 @ 30 - 45R - 210 GPM, 3800# - #1 CHOKE FULL OPEN. 02:00 to 05:00 - 02 - Drilling - ROT DRLG F/ 9792 - 9820 @ 9.3 FPH AVG - 210 GPM 3700# - BOTH CHOKES OPEN - THIS SECTION OF HOLE TOOK 60 BBLS TOOK 60 BBLS MUD - POSSIBLE FRACTURE @ 9805.

DC: \$46,862

Activity: 21 - Other

Cumm DHC:

\$3,166,874

Cumm DHC+Suspended: \$3,166,874

**Activity Date: 7/12/2002** 

Current Depth: 24 Hr. Footage Made:

9892 ft. 72 ft.

Days Since Spud: 50

Weather:

Operations:

05:00 to 06:30 - 02 - Drilling - SLD DRLG F/9820 - 9828 @ 20-30R W/ 210 GPM @ 3800# - BOTH CHOKES FULL

OPEN.

06:30 to 08:30 - 02 - Drilling - ROT DRLG F/ 9828 - 9851 W/ 210 GPM @ 3700# - BOTH CHOKES FULL OPEN.

08:30 to 09:00 - 21 - Other - WORKING ON TOP DRIVE SCR - BLOWN FUSE.

09:00 to 09:30 - 02 - Drilling - ROT DRLG F/ 9851 - 9854 W/ 210 GPM @ 3700 - BOTH CHOKES OPEN.

09:30 to 11:00 - 02 - Drilling - SLD DRLG F/ 9854 - 9862 @ 20-30R W/ 210 GPM @ 3800# - BOTH CHOKES OPEN. 11:00 to 15:00 - 02 - Drilling - ROT DRLG F/ 9862 - 9892 W/ 210 GPM @ 3700 - BOTH CHOKES FULL OPEN.

15:00 to 19:00 - 21 - Other - CIRC HOLE CLEAN & WOO - SICP 300#.

19:00 to 20:30 - 21 - Other - STRIP OOH W/ WET STRING TO BTM OF CSG - SICP 300#.

20:30 to 22:30 - 21 - Other - CIRC & KILL WELL W/ 16.5 & 17.5 KILL MUD @ 60 SPM (110 GPM).

22:30 to 23:30 - 21 - Other - MONITOR WELL & BUILD SLUG.

23:30 to 04:30 - 21 - Other - PUMP SLUG - POOH - BREAK OFF BIT - SET MM TO 0 - PULL MWD - L/D ALL BHA.

04:30 to 05:00 - 21 - Other - P/U RR BIT W/ JETS OUT, SCRAPPER, X-O & PREPARING TO GIH.

DC: \$44,545

Cumm DHC:

\$3,211,419

Cumm DHC+Suspended: \$3,211,419

RECEIVED



#### **Hunt Petroleum Corporation**

1601 Elm St., Suite 3400 Dallas, TX 75201 (214) 880-8800

# **Daily Activity Report**

Report Date : Tuesday, July 09, 2002

Page 1 of 3

CONFIDENTIAL

Well='CANE CREEK FEDERAL #11-1' for 7/3/2002 to 7/9/2002

DAILY DRILLING REPORT

From: 7/3/2002

To: 7/9/2002

Well Name: CANE CREEK FEDERAL #11-1

HUNT PETROLEUM (AEC), INC.

Operator:

Loc:

STR: 11 - 365 - 19E County: GRAND, UT

API Code: 43 019 31364

**AFEDHC:** \$2,175,991 AFECWC: \$2,175,991

AFE #: 022012D

WI: 0.572829 NRI

AFE Type: DEV

**Proposed Depth:** 

9339 ft.

**Current Depth:** 

**Current Depth:** 

24 Hr. Footage Made:

O ft.

Spud Date: 5/23/2002

Activity: 02 - Drilling

Field: KANE SPRINGS

Rig Rel Date:

**Total Depth:** 

Activity Date: 7/3/2002

8885 ft.

320 ft.

Days Since Spud: 41

Weather:

Operations:

05:00 to 13:00 - 02 - Drilling - ROT DRLG F/ 8565' - 8672' 107' 13.4'/HR AVG 220 GPM/3750 PSI.

13:00 to 13:30 - 21 - Other - S/R & TOP DRIVE

13:30 to 15:30 - 02 - Drilling - ROT DRLG F/ 8672' - 8704' 32' 16'/HR AVG 220 GPM/3700 PSI. 15:30 to 18:00 - 02 - Drilling - SLD DRLG 180 F/ 8704' - 8724' 20' 8.0'/HR AVG 220 GPM/3600 PSI.

18:00 to 05:00 - 02 - Drilling - ROT DRLG F/ 8724' - 8885' 161' 14.6'/HR AVG 220 GPM/3650 PSI. NOTE: MUD COSTS REFLECT THE TRANSFER OF 1100 BBLS (\$55K) OF LIQUID MUD FROM THE CANE CREEK FEDERAL

7-1. TO DATE PLUS \$5215 DRAYAGE.

\$108,149

Cumm DHC:

\$2,778,548

Cumm DHC+Suspended:

\$2,778,548

Activity Date: 7/4/2002

Days Since Spud: 42

Activity: 02 - Drilling

24 Hr. Footage Made: Weather:

9115 ft. 230 ft.

Operations:

05:00 to 09:30 - 02 - Drilling - ROT DRLG F/ 8885' - 8957' 72' 16.0'/HR AVG 220 GPM/3750 PSI. 09:30 to 15:30 - 02 - Drilling - SLD DRLG HS F/ 8957' - 8978' 21' 3.5'/HR AVG 220 GPM/3600 PSI.

15:30 to 20:30 - 02 - Drilling - ROT DRLG F/ 8978' - 9032' 54' 10.8'/HR AVG 220 GPM/3750 PSI.

20:30 to 21:00 - 21 - Other - C/O SHAKER SCREENS

21:00 to 01:00 - 02 - Drilling - ROT DRLG F/ 9032' - 9083' 51' 12.8'/HR AVG 220 GPM/3800 PSI. 01:00 to 03:00 - 02 - Drilling - SLD DRLG 10L F/ 9083' - 9098' 15' 7.5'/HR AVG 220 GPM/3600 PSI.

03:00 to 05:00 - 02 - Drilling - ROT DRLG F/ 9083' - 9115' 32' 16'/HR AVG 220 GPM/3800 PSI. NOTE: CUT MUD

WT F/ 15.8 PPG TO 15.6 PPG. NOTE: HAPPY 4TH OF JULY!

DC: \$47,627

**Cumm DHC:** 

\$2,826,175

Cumm DHC+Suspended:

\$2,826,175

CONFIDENTIAL

HECEIVED

JUL 12 2002

DIVISION OF OIL, GAS AND MINING

From: 7/3/2002

To: 7/9/2002

Well='CANE CREEK FEDERAL #11-1' for 7/3/2002 to 7/9/2002

**Activity Date: 7/5/2002** 

**Current Depth:** 

9199 ft.

Days Since Spud: 43

24 Hr. Footage Made:

84 ft.

Activity: 21 - Other

05:00 to 07:30 - 02 - Drilling - ROT DRLG F/ 9115' - 9137' 22' 8.8'/HR AVG 220 GPM/3750 PSI. Operations: 07:30 to 08:30 - 21 - Other - PUMP REPAIR - CHG SWAB IN #1 PUMP, CAP GASKET IN #2 PUMP. 08:30 to 11:00 - 02 - Drilling - ROT DRLG F/ 9137' - 9162' 25' 10.0'/HR AVG 220 GPM/3750 PSI.

11:00 to 12:30 - 02 - Drilling - SLD DRLG 150L F/ 9162' - 9172' 10' 6.7'/HR AVG 220 GPM/3600 PSI. 12:30 to 16:30 - 02 - Drilling - ROT DRLG F/ 9172' - 9197' 25' 6.3'/HR AVG 220 GPM/3800 PSI.

16:30 to 17:30 - 21 - Other - PUMP PRESS INCR 200# - TROUBLESHOOT, CK DP SCRN - MONITOR WELL, WELL

FLOWING - CWI MAX SICP 300#.

17:30 to 18:30 - 02 - Drilling - ROT DRLG LIVE F/ 9197 - 9199' 2' 6.3'/HR AVG 220 GPM/3800 PSI, 350# CP/NO

FLARE.

18:30 to 19:30 - 21 - Other - CLEAR FORMATION AND DEBRIS FROM #2 CHOKE BY REMOVING FROM CHOKE

MANIFOLD - REPLACE SAME.

19:30 to 20:30 - 21 - Other - ATTEMPT TO DRL ON CHOKE, MWD FAILED, CWI.

20:30 to 03:30 - 21 - Other - TRANSFER KILL MUD TO ACTIVE SYS - KILL MUD WT REDUCED TO 16.1 FROM 18

PPG. ISOLATE SUCTION PIT AND BUILD 280 BBLS MUD TO 17.8 PPG - MUD MIXING CAPABILITIES

HAMPERED BY WEAK MIXING PUMPS.

03:30 to 04:30 - 21 - Other - PUMP 80 BBLS 17.8 PPG DOWN DP FOR SLUG.

04:30 to 05:00 - 21 - Other - POOH STRIPPING THROUGH ROTATING HEAD - CP 700#.

DC: \$56.044

Cumm DHC:

\$2,882,219

Cumm DHC+Suspended: \$2,882,219

**Activity Date : 7/6/2002** 

\_\_\_\_\_\_

Current Depth:

9199 ft.

0 ft.

Days Since Spud: 44

Operations:

24 Hr. Footage Made: Weather:

Weather:

Activity: 21 - Other

05:00 to 06:30 - 21 - Other - POOH WET 16 STDS TO 7710' STRIPPING THRU ROTATING HD - CP 500#. 06:30 to 08:30 - 05 - Condition Mud & Circulate - COND MUD IN SUCTION PIT - WT UP F/ 17.6 T/ 18 PPG.

08:30 to 09:30 - 21 - Other - BTM KILL WELL W/ 245 BBLS 18 PPG KILL MUD - 0 CP.

09:30 to 10:00 - 21 - Other - MONITOR WELL - NO FLOW.

10:00 to 12:30 - 21 - Other - ATTEMPT TO POOH - DP "U" TBG, BUILD 19.7 PPG SLUG.

12:30 to 13:00 - 21 - Other - PUMP SLUG.

13:00 to 16:30 - 21 - Other - POOH TO BIT - STRIPPED THRU ROTATING HD TO MONEL DC. 16:30 to 19:30 - 21 - Other - BREAK BIT, C/O MUD MTRS & MWD TOOLS - SURFACE TEST SAME.

19:30 to 22:00 - 21 - Other - RIG REPAIR - REPAIR LEAKING 4" VALVE ON MUD LINE

22:00 to 01:30 - 21 - Other - TIH STRIPPING THRU ROTATING HD TO 6300' - FILL PIPE & BREAK CIRC AT 3510'. 01:30 to 04:30 - 21 - Other - FILL DP & ATT TO CIRC THRU 1 CHOKE W/O RTNS - OPEN BOTH CHOKES &

PANIC LINE TO ESTABLISH FULL CIRC - DISP KILL MUD TO STORAGE TANK - 100# CP. 04:30 to 05:00 - 21 - Other - TIH STRIPPING THRU ROTATING HD.

DC: \$43,346 .....

Cumm DHC:

\$2,925,565

Cumm DHC+Suspended:

\$2,925,565

Activity Date: 7/7/2002

Operations:

Days Since Spud: 45

Current Depth: 24 Hr. Footage Made: 9320 ft. 121 ft.

Activity: 02 - Drilling

05:00 to 07:00 - 21 - Other - FIN TIH TO BTM @ 9199 W/ 200# CP. 07:00 to 07:30 - 21 - Other - FILL UP & BREAK CIRC.

07:30 to 11:30 - 02 - Drilling - ROT DRLG F/ 9199 - 9220. 11:30 to 13:30 - 21 - Other - CLEAR DEBRIS F/#1 & #2 PUMPS.

13:30 to 17:00 - 02 - Drilling - ROT DRLG F/ 9220 - 9251.

17:00 to 21:00 - 21 - Other - WORK ON MUD PUMPS - CHANGE SUCTION VALVES, CHANGE 2" BLEED OFF

VALVES, CHANGE SEAT & PADDLE ON 4" VALVE ON #2 PUMP, FLUSHED SUCTION LINE.

21:00 to 01:00 - 02 - Drilling - ROT DRLG F/ 9251 - 9287.

01:00 to 01:30 - 21 - Other - WORK ON MUD PUMPS - REMOVE SHALE FROM UNDER SUCTION VALVE.

01:30 to 02:30 - 02 - Drilling - ROT DRLG F/ 9287 - 9303.

02:30 to 03:00 - 21 - Other - SURVEY @ 9260.

03:00 to 05:00 - 02 - Drilling - ROT DRLG F/ 9303 - 9320.

Cumm DHC: DC: \$40,823

\$2,966,388

Cumm DHC+Suspended: .....

ECEIVED

JUL 12 2002

From: 7/3/2002

To: 7/9/2002

9530 ft.

Well='CANE CREEK FEDERAL #11-1' for 7/3/2002 to 7/9/2002

**Activity Date: 7/8/2002** 

**Current Depth:** 

24 Hr. Footage Made: 210 ft. Davs Since Spud: 46

Weather: Activity: 02 - Drilling

05:00 to 11:30 - 02 - Drilling - ROT DRLG F/ 9320' - 9373' 8.2'/HR AVG 210 GPM/3800 PSI. Operations:

11:30 to 12:30 - 21 - Other - WORK ON MUD PUMPS - REMOVE SHALE & DEBRIS FROM UNDER SUCTION

12:30 to 14:30 - 02 - Drilling - ROT DRLG F/ 9373' - 9398' 7.5'/HR AVG 210 GPM/3800 PSI.

14:30 to 15:00 - 21 - Other - WORK ON MUD PUMPS - REMOVE SHALE & DEBRIS FROM UNDER SUCTION

VALVE.

15:00 to 17:00 - 02 - Drilling - ROT DRLG F/ 9398' - 9424' 13.0/HR AVG 210 GPM/3800 PSI.

17:00 to 20:00 - 21 - Other - WORKING ON PUMPS - RUBBER UNDER SUCTION VALVE ON #1 - POPOFF VALVE

SEAT WASHED OUT ON #2, CHANGE POPOFF VALVE ON SAME.

20:00 to 20:30 - 02 - Drilling - ROT DRLG F/ 9424' - 9430' 12'/HR AVG 210 GPM/3800 PSI.

20:30 to 21:00 - 21 - Other - SURVEY @ 9387 - CONNECTION.

21:00 to 02:00 - 02 - Drilling - ROT DRLG F/ 9430' - 9493' 12.6'/HR AVG 210 GPM/3800 PSI. 02:00 to 03:30 - 02 - Drilling - SLD DRLG F/ 9493' - 9511' 12.0'/HR AVG 210 GPM/3800. 03:30 to 04:00 - 02 - Drilling - ROT DRLG G/ 9511' - 9520' 18.0'/HR AVG 210 GPM/3800.

04:00 to 04:30 - 21 - Other - SURVEY @ 9482 - CONNECTION

04:30 to 05:00 - 02 - Drilling - ROT DRLG F/ 9520' - 9530' 20'/HR AVG 210 GPM/3800 PSI.

\$3.015.927 Cumm DHC: \$3,015,927 Cumm DHC+Suspended: DC: \$49,539

Activity Date: 7/9/2002

9685 ft. **Current Depth:** 155 ft. 24 Hr. Footage Made:

Days Since Spud: 47

Activity: 21 - Other

Weather:

05:00 to 07:00 - 02 - Drilling - ROT DRLG F/ 9530 - 9567 @ 18.5 FPH AVG. Operations:

07:00 to 07:30 - 02 - Drilling - SLD DRLG F/ 9587 - 9571 @ 8.0 FPH AVG. 07:30 to 08:30 - 21 - Other - CLEAN SHALE FROM PLUGGED CHOKES. 08:30 to 10:30 - 02 - Drilling - SLD DRLG FROM 9571 - 9584 @ 6.5 FPH AVG.

10:30 to 11:00 - 02 - Drilling - ROT DRLG F/ 9584 - 9589 @ 10.0 FPH AVG. 11:00 to 11:30 - 21 - Other - WORKING ON PUMPS.

11:30 to 13:00 - 02 - Drilling - ROT DRLG F/ 9589 - 9605 @ 10.6 FPH AVG.

13:00 to 14:30 - 21 - Other - WORKIG ON PUMPS.

14:30 to 15:00 - 21 - Other - CIRC & WORKING W/ MWD DUE TO 400# PRESS INCR FROM PROBABLE

PLUGGING.

15:00 to 16:00 - 02 - Drilling - ROT DRLG F/ 9605 - 9616 @ 11.0 FPH AVG W/ 170 GPM @ 3800 PSI.

16:00 to 16:30 - 21 - Other - CIRC - WORKING PIPE IN EFFORT TO UNPLUG MWD - WASHPIPE PACKING WENT

OUT IN TOP DRIVE.

16:30 to 20:30 - 21 - Other - CHANGE WASHPIPE PACKING IN TOP DRIVE & TEST SAME

20:30 to 21:30 - 21 - Other - CIRC - WORKING PIPE TO REDUCE HIGH PRESS TO GET ENOUGH FLOW RATE

TO RECEIVE DATA FROM MWD - RECYCLE PUMPS - OBTAINED SURVEY - MADE CONNECTION.

21:30 to 04:00 - 02 - Drilling - ROT DRLG F/ 9616 - 9685 @ 10.6 FPH AVG 200 GPM 3700#.

04:00 to 05:00 - 21 - Other - START TO SLD DRL & TOP DRIVE WILL NOT TURN - WORKING ON TOP DRIVE

**CONTROL PANEL.** 

Cumm DHC+Suspended: \$3,064,412 \$3,064,412 DC: \$48.485 Cumm DHC:

RECEIVED

JUL 1 2 2002



#### Hunt Fecroleum Corporation

1601 Elm St., Suite 3400 Dallas, TX 75201 (214) 880-8800

# **Daily Activity Report**

AFE#: 022012D

AFEDHC: \$2,175,991

AFECWC: \$2,175,991

AFE Type: DEV

WI: 0.572829 NRI

Report Date : Tuesday, July 02, 2002

Page 1 of 3

From: 6/26/2002

CONFIDENTIAL

7778 ft.

38 ft.

To: 7/2/2002

Well='CANE CREEK FEDERAL #11-1' for 6/26/2002 to 7/2/2002

#### DAILY DRILLING REPORT

Well Name: CANE CREEK FEDERAL #11-1

Operator: AVIARA ENERGY CORPORATION

Loc:

County: GRAND, UT

Field: KANE SPRINGS

STR: 11 - 265- 19E

API Code: 43 019 31364

**Proposed Depth:** 

Total Depth:

9339 ft. O ft.

**Current Depth:** 

24 Hr. Footage Made:

Activity Date: 6/26/2002

**Spud Date:** 5/23/2002

Rig Rel Date:

Days Since Spud: 34

Operations:

Activity: 21 - Other

Weather:

05:00 to 06:30 - 21 - Other - PUMPS CAVITATING - CLEAR RUBBER & DEBRIS FROM FLUID ENDS.

06:30 to 09:00 - 02 - Drilling - SLD DRLG HS F/7740' - 7748' 8' 3.2'/HR AVG - 220 GPM/3500 PSI 09:00 to 09:30 - 21 - Other - PUMPS CAVITATING - CLEAR RUBBER & DEBRIS FROM FLUID ENDS. 09:30 to 12:30 - 02 - Drilling - SLD DRLG HS F/7748' - 7752' 4' 1.3'/HR AVG - 220 GPM/3500 PSI 12:30 to 13:30 - 21 - Other - PUMPS CAVITATING - CLEAR RUBBER & DEBRIS FROM FLUID ENDS. 13:30 to 19:30 - 02 - Drilling - SLD DRLG HS F/7752' - 7770' 18' 3.0'/HR AVG - 220 GPM/3650 PSI 19:30 to 21:00 - 21 - Other - PUMPS CAVITATING - CLEAR RUBBER & DEBRIS FROM FLUID ENDS. 21:00 to 23:00 - 02 - Drilling - SLD DRLG HS F/7770' - 7776' 6' 3.0'/HR AVG - 220 GPM/3650 PSI 23:00 to 00:00 - 21 - Other - PUMPS CAVITATING - CLEAR RUBBER & DEBRIS FROM FLUID ENDS. 00:00 to 00:30 - 02 - Drilling - SLD DRLG HS F/7776' - 7777' 1' 2.0'/HR AVG - 220 GPM/3650 PSI 00:30 to 02:00 - 21 - Other - PUMPS CAVITATING - CLEAR RUBBER & DEBRIS FROM FLUID ENDS. 02:00 to 02:30 - 02 - Drilling - SLD DRLG HS F/7777' - 7778' 1' 2.0'/HR AVG - 220 GPM/3650 PSI

02:30 to 03:00 - 21 - Other - MIX & PUMP SLUG

03:00 to 05:00 - 21 - Other - POOH FOR STEERABLE ASSEMBLY. NOTE: WILL INSTALL SUCTION SCREENS IN

THE PUMP SUCTION TODAY.

DC: \$46,780

Cumm DHC:

\$2,294,717

Cumm DHC+Suspended:

\$2,294,717

**Activity Date:** 6/27/2002 Days Since Spud: 35

Operations:

24 Hr. Footage Made:

Weather:

**Current Depth:** 

7795 ft. 17 ft.

Activity: 02 - Drilling

05:00 to 08:00 - 21 - Other - POOH FOR STEERABLE ASSY.

08:00 to 09:00 - 21 - Other - L/D AB ASSY & P/U 1.83 DEG STEERABLE ASSY - BIT #5 GRADED AS 8 INNER, 7

OUTER, BROKEN TEETH, ALL IN GAUGE. ATTEMPT TO TEST MOTOR - PUMPS CAVITATING.

09:00 to 11:00 - 21 - Other - TROUBLESHOOT PUMP - AGAIN, DEBRIS IN FLUID END. TRANSFER MUD AND

CLEAR PITS OF VISIBLE DEBRIS.

11:00 to 11:30 - 21 - Other - INSTALL ROTATING HD ELEMENTS.

11:30 to 12:30 - 21 - Other - TIH 26 STDS TO 2564'. 12:30 to 14:30 - 21 - Other - CUT & SLIP DRL LINE.

14:30 to 17:00 - 21 - Other - TRANSFER SYS MUD OVER SHAKERS TO SHAKE OUT DEBRIS.

17:00 to 18:00 - 21 - Other - TIH TO 4970'.

18:00 to 20:00 - 21 - Other - INSTALL SUCTION SCREEN IN #1 PUMP.

20:00 to 20:30 - 21 - Other - FILL PIPE @ 4970'.

20:30 to 22:00 - 21 - Other - TIH - FILL PIPE EVERY 20 STDS.

22:00 to 00:30 - 21 - Other - FILL PIPE - 2" BLEED OFF VALVE LEAKING. BULL PLUG SAME, PUMP CAVITATING,

WORK ON SCREEN.

00:30 to 05:00 - 02 - Drilling - SLD DRLG HS F/7778' - 7796' 17' 3.8'/HR AVG 220 GPM/3805 PSI

DC: \$62,289

Cumm DHC:

\$2,357,006

Cumm DHC+Suspended:

\$2,357,006

JUL 0 5 **2002** 

**DIVISION OF** OIL, GAS AND MINING CONFIDENTIAL

From: 6/26-2002 To: 7/2/2002

Well='CANE CREEK FEDERAL #11-1' for 6/26/2002 to 7/2/2002

Activity Date : 6/28/2002

Current Depth:

7902 ft.

Days Since Spud: 36

24 Hr. Footage Made:

107 ft.

Activity: 02 - Drilling

Weather:

Operations:

05:00 to 12:00 - 02 - Drilling - SLD DRLG HS F/ 7795' - 7813' 18' 2.6'/HR AVG 220 GPM/3805 PSI

12:00 to 12:30 - 21 - Other - S/R & TOP DRIVE

12:30 to 14:00 - 02 - Drilling - SLD DRLG HS F/ 7813' - 7817' 4' 2.7'/HR AVG 220 GPM/3850 PSI

14:00 to 14:30 - 21 - Other - SURV & CONN - 7772 MD 82.7 DEG 129.01 AZ

14:30 to 00:00 - 02 - Drilling - ROT DRLG F/ 7817' - 7879' 62' 6.5'/HR AVG 220 GPM/3880 PSI 00:00 to 03:30 - 02 - Drilling - SLD DRLG 180 F/ 7879 - 7894 15 4.3'/HR AVG 220 GPM/3650 PSI 03:30 to 05:00 - 02 - Drilling - ROT DRLG F/ 7894' - 7902' 8' 5.3'/HR AVG 220 GPM/3880 PSI

DC: \$89,069

Cumm DHC:

\$2,446,075

Cumm DHC+Suspended: \$2,446,075

**Activity Date:** 6/29/2002

**Current Depth:** 

24 Hr. Footage Made:

7932 ft.

30 ft.

Days Since Spud: 37

Activity: 02 - Drilling Weather:

Operations:

05:00 to 07:00 - 02 - Drilling - ROT DRLG F/ 7902' - 7910' 8' 4.0'/HR AVG 220 GPM/3880 PSI

07:00 to 08:00 - 21 - Other - TROUBLESHOOT PUMP PRESS INCR - SURF EQUIP OK, PROBLEM DOWNHOLE.

08:00 to 10:30 - 21 - Other - CIRC, BUILD & PUMP 2# SLUG - FAILED. BUILD & PUMP 3# SLUG.

10:30 to 11:00 - 21 - Other - RIG REPAIR - WORK ON DP SPINNERS.

11:00 to 15:30 - 21 - Other - POOH TO SHOE - REMOVE ROTATING HD ELEMENTS - CONT POOH.

15:30 to 17:00 - 21 - Other - C/O MUD MTRS, CLEAN OBM F/ FLR - C/O DP SPINNERS.

17:00 to 18:00 - 21 - Other - P/U BIT #7, INSTALL MWD.

18:00 to 19:00 - 21 - Other - INSTALL ROTATING HD ELEMENTS. 19:00 to 19:30 - 21 - Other - TEST MWD.

19:30 to 22:30 - 21 - Other - TIH FILLING PIPE EVERY 20 STDS.

22:30 to 23:30 - 21 - Other - RAISE MUD WT IN PITS F/ 15.2 T/ 15.8 PPG W/ 17.9 PPG KILL MUD. 23:30 to 00:00 - 02 - Drilling - ROT DRLG F/ 7910' - 7913' 3' 6.0'/HR AVG 220 GPM/3880 PSI. 00:00 to 01:00 - 02 - Drilling - SLD DRLG 150R F/ 7913' - 7918' 5' 5.0'/HR AVG 220 GPM/3880 PSI.

01:00 to 03:00 - 21 - Other - RIG REPAIR - REPLACE SCREEN GASKET ON #1 PUMP & CLEAR DEBRIS F/

VALVES IN #2 PUMP.

03:00 to 04:00 - 02 - Drilling - SLD DRLG 150R F/ 7918' - 7925' 7' 7.0'/HR AVG 220 GPM/3900 PSI. 04:00 to 05:00 - 02 - Drilling - ROT DRLG F/ 7925' - 7932' 7' 6.0'/HR AVG 220 GPM/3900 PSI

DC: \$46,421

Cumm DHC:

\$2,492,496

Cumm DHC+Suspended:

**Current Depth:** 

\$2,492,496

Activity Date: 6/30/2002

24 Hr. Footage Made:

8162 ft. 230 ft.

Days Since Spud: 38

Activity: 02 - Drilling

Weather:

Operations:

05:00 to 07:00 - 02 - Drilling - ROT DRLG F/ 7932 - 7944' 12' 6.0'/HR AVG 220 GPM/3900 PSI. 07:00 to 09:00 - 02 - Drilling - SLD DRLG 90R F/ 7944' - 7961' 17' 8.5'/HR AVG 220 GPM/3900 PSI. 09:00 to 12:00 - 02 - Drilling - ROT DRLG F/ 7961' - 7977' 16' 5.3'/HR AVG 220 GPM/3900 PSI. 12:00 to 12:30 - 02 - Drilling - SLD DRLG 150R F/ 7977' - 7984' 7' 14'/HR AVG 220 GPM/3900 PSI. 12:30 to 17:00 - 02 - Drilling - ROT DRLG F/ 7984' - 8027' 43' 9.6'/HR AVG 220 GPM/3950 PSI. 17:00 to 17:30 - 21 - Other - SERV RIG & TOP DRIVE

17:30 to 19:00 - 02 - Drilling - ROT DRLG F/ 8027' - 8055' 28' 18.7'/HR AVG 220 GPM/3950 PSI. 19:00 to 22:00 - 02 - Drilling - SLD DRLG 15R F/ 8055' - 8074' 19' 6.3'/HR AVG 220 GPM/3900 PSI.

22:00 to 23:30 - 21 - Other - RIG REPAIR - REPLC WASHED OUT 2" ON STD PIPE.

23:30 to 05:00 - 02 - Drilling - ROT DRLG F/ 8074' - 8162' 88' 16.0'/HR AVG 220 GPM/3950 PSI.

DC: \$40.836

Cumm DHC:

\$2,533,332

Cumm DHC+Suspended:

\$2,533,332

RECEIVED

JUL 0 5 **2002** 

**DIVISION OF** OIL, GAS AND MINING

From: 6/2672002 To: 7/2/2002

Well='CANE CREEK FEDERAL #11-1' for 6/26/2002 to 7/2/2002

Activity Date: 7/1/2002

**Current Depth:** 

8377 ft.

Days Since Spud: 39

24 Hr. Footage Made:

215 ft.

Activity: 02 - Drilling

Operations:

05:00 to 10:00 - 02 - Drilling - ROT DRLG F/ 8162' - 8219' 57' 11.4'/HR AVG 220 GPM/3950 PSI. 10:00 to 12:00 - 02 - Drilling - SLD DRLG 20R F/ 8219' - 8237' 18' 9.0'/HR AVG 220 GPM/3900 PSI.

12:00 to 13:30 - 21 - Other - RIG REPAIR - REPLACE CLAMP ON STD PIPE.

13:30 to 14:00 - 02 - Drilling - SLD DRLG 20R F/ 8237' - 8244' 7' 14.0'/HR AVG 220 GPM/3900 PSI. 14:00 to 14:30 - 02 - Drilling - ROT DRLG F/ 8244' - 8249' 5' 10'/HR AVG 220 GPM/3950 PSI. 14:30 to 16:30 - 02 - Drilling - SLD DRLG 20R F/ 8249' - 8274' 25' 12.5'/HR AVG 220 GPM/3900 PSI. 16:30 to 18:00 - 02 - Drilling - ROT DRLG F/ 8274' - 8293' 19' 12.7'/HR AVG 220 GPM/3800 PSI. 18:00 to 21:00 - 02 - Drilling - SLD DRLG 10R F/ 8293' - 8304' 11' 3.7'/HR AVG 220 GPM/3850 PSI. 21:00 to 22:00 - 02 - Drilling - ROT DRLG F/ 8304' - 8324' 20' 20.0'/HR AVG 220 GPM/3900 PSI. 22:00 to 00:00 - 02 - Drilling - SLD DRLG 10R F/ 8324' - 8339' 15' 7.5'/HR AVG 220 GPM/3850 PSI. 00:00 to 02:30 - 02 - Drilling - ROT DRLG F/ 8339' - 8369' 30' 12.0'/HR AVG 220 GPM/3900 PSI. 02:30 to 05:00 - 02 - Drilling - SLD DRLG 180 F/ 8369' - 8377' 8' 3.2'/HR AVG 220 GPM/3850 PSI.

DC: \$50,574

Cumm DHC:

\$2,583,906

Cumm DHC+Suspended: \$2,583,906

**Activity Date : 7/2/2002** 

**Current Depth:** 

24 Hr. Footage Made:

8565 ft.

188 ft.

Days Since Spud: 40

Operations:

Weather:

Activity: 02 - Drilling

05:00 to 08:30 - 02 - Drilling - SLD DRLG 180 F/ 8377' - 8391' 14' 4.0'/HR AVG 220 GPM/3850 PSI. 08:30 to 15:30 - 21 - Other - RIG REPAIR - TOP DRIVE BRAKE FAILED - REPAIR SAME.

15:30 to 16:00 - 21 - Other - SERVICE RIG & TOP DRIVE.

16:00 to 19:30 - 02 - Drilling - SLD DRLG 180 F/ 8391' - 8419' 27' 7.5'/HR AVG 220 GPM/3850 PSI - DOWNTIME

GAS, 1070 U MW 15.5 PPG.

19:30 to 00:30 - 02 - Drilling - ROT DRLG F/ 8419' - 8497' 78' 15.6'/HR AVG 220 GPM/3800 PSI.

00:30 to 02:00 - 02 - Drilling - SLD DRLG 180 F/ 8497' - 8514' 17' 11.3'/HR AVG 220 GPM/3800 PSI. 02:00 to 05:00 - 02 - Drilling - ROT DRLG F/ 8514' - 8565' 51' 17.0'/HR AVG 220 GPM/3800 PSI. NOTE: MUD COSTS REFLECT THE TRANSFER OF 800 BBLS (\$40K) OF LIQUID MUD FROM THE CANE CREEK FED 7-1. TO

DATE CURRENTLY TRANSFERING REMAINDER OF LIQUID MUD & WILL HAVE THAT ACCOUNTING

TOMORROW.

DC: \$86,493

Cumm DHC:

\$2,670,399 .....

Cumm DHC+Suspended:

\$2,670,399

RECEIVED

JUL 0 5 2002

**DIVISION OF** OIL GAS AND MINING



## **Hunt Fetroleum Corporation**

1601 Elm St., Suite 3400 Dallas, TX 75201 (214) 880-8800

# **Daily Activity Report**

Report Date:

Tuesday, June 25, 2002

Page 1 of 3

From : 6/18/2002

CUNFILIENTIAL

To: 6/25/2002

Well='CANE CREEK FEDERAL #11-1' for 6/18/2002 to 6/25/2002

#### DAILY DRILLING REPORT

Well Name: CANE CREEK FEDERAL #11-1

Operator: AVIARA ENERGY CORPORATION

Loc:

STR: 11 - 265-19F

AFEDHC: \$2,175,991

AFE#: 022012D

WI: 0.572829 NRI

24 Hr. Footage Made:

API Code: 43 019 31364

AFECWC: \$2,175,991

AFE Type: DEV

Proposed Depth:

9339 ft.

**Spud Date:** 5/23/2002

Rig Rel Date:

Total Depth:

0 ft.

**Activity Date:** 6/18/2002

County: GRAND, UT

Field: KANE SPRINGS

**Current Depth:** 

7635 ft. 460 ft.

Days Since Spud: 26

Activity: 21 - Other

Weather:

05:00 to 07:30 - 02 - Drilling - SLD DRL F/7175 - 7225' 50' 20 HR TF:HS 25L. Operations:

07:30 to 08:00 - 21 - Other - CHANGE OUT SWAB IN #1 PUMP.

08:00 to 09:30 - 02 - Drilling - SLD DRL F/ 7225 - 7240' 15' 10 HR TF:HS 25L 09:30 to 10:00 - 02 - Drilling - ROTARY DRL F/ 7240 - 7245' 5' 10FH 10:00 to 12:00 - 02 - Drilling - SLD DRL F/ 7240 - 7258' 18' 9 FH TF:HS 25L 12:00 to 12:30 - 02 - Drilling - ROTARY DRL F/ 7258 - 7266' 12' 24FH

12:30 to 16:00 - 02 - Drilling - SLD DRL F/7266 - 7328' 62' 17.71 FH TF:HS 25L

16:00 to 16:30 - 21 - Other - RIG SERVICE

16:30 to 22:00 - 02 - Drilling - SLD DRL F/7328 - 7452' 124' 22.5 FH TF:HS 30L

22:00 to 22:30 - 02 - Drilling - ROTARY DRL F/ 7452 - 7457' 5' 10FH 22:30 to 23:00 - 02 - Drilling - SLD DRL F/7457 - 7485' 28' 56 FH TF:HS 5L 23:00 to 23:30 - 02 - Drilling - ROTARY DRL F/ 7485 - 7491' 6' 12 FH 23:30 to 00:00 - 02 - Drilling - SLD DRL F/7491 - 7515' 24' 48FH TF:HS 00:00 to 00:30 - 02 - Drilling - ROTARY DRL F/ 7515 - 7521' 6' 12 FH 00:30 to 01:00 - 02 - Drilling - SLD DRL F/7521 - 7546' 25' 50 FH TF:HS 01:00 to 01:30 - 02 - Drilling - ROTARY DRL F/ 7546 - 7556' 10' 20 FH 01:30 to 02:30 - 02 - Drilling - SLD DRL F/ 7556 - 7579' 23' 23 FH TF:HS 02:30 to 03:00 - 02 - Drilling - ROTARY DRL F/ 7579 - 7589' 10' 20 FH 03:00 to 04:30 - 02 - Drilling - SLD DRL F/ 7589 - 7635' 46' 30.6 FH TF:HS

04:30 to 05:00 - 21 - Other - CONNECTION AND SURVEY

DC: \$47,195

Cumm DHC:

\$1,777,229

Cumm DHC+Suspended:

Will I street

Activity Date: 6/19/2002

Operations:

Days Since Spud: 27

**Current Depth:** 

7702 ft.

24 Hr. Footage Made:

67 ft.

Activity: 21 - Other

Weather:

05:00 to 07:00 - 02 - Drilling - ROTARY DRL F/ 7635 - 7693' 58' 29 FH (DRL INTO KANE CREEK CLASTIC #21). 07:00 to 07:30 - 21 - Other - CIRC UP SAMPLE UP @ 7693'.

07:30 to 08:00 - 02 - Drilling - ROTARY DRL F/ 7693 - 7702' 9' 18 FH (DRL A TOTAL OF 20' MD & 10' TVD INTO

THE ANHYDRITE #2).

08:00 to 10:00 - 05 - Condition Mud & Circulate - CIRC & COND MUD; BUILD SLUG.

10:00 to 11:30 - 21 - Other - WIPER TRIP 36 STDS. 11:30 to 12:30 - 21 - Other - TRIP BACK TO BTM.

12:30 to 13:00 - 21 - Other - FILL DP 13:00 to 15:00 - 21 - Other - CIRC HOLE.

15:00 to 17:00 - 21 - Other - RIG UP LAYDOWN MACHINE.

17:00 to 01:30 - 21 - Other - COME OUT OF HOLE LAYING DOWN DRL PIPE. 01:30 to 04:00 - 21 - Other - LAYING DOWN BHA, BIT, MWD AND MOTOR.

04:00 to 05:00 - 21 - Other - RIG UP WESTATES CSG SERVICE.

DC: \$37.688

Cumm DHC:

\$1,814,917

Cumm DHC+Suspended:

\$1,814,917

6/25/2002 01:15 PM

CONFIDENT

#### DAILY DRILLING REPORT

From :6/18⊶002 To: 6/25/2002

Well='CANE CREEK FEDERAL #11-1' for 6/18/2002 to 6/25/2002

**Activity Date:** 6/20/2002

**Current Depth:** 

7702 ft.

Davs Since Spud: 28

24 Hr. Footage Made:

0 ft.

Activity: 21 - Other

Weather:

Operations:

05:00 to 07:30 - 21 - Other - RIG UP CSG CREW.

07:30 to 13:30 - 21 - Other - RUN 179 JTS OF 7" N-80 CSG FIRST 86 JTS 32#, 90 JTS 26# AND LAST 3 JTS 32#.

TOTAL FOOTAGE 7725.07', TAG BTM HOLE AT 7702'.

13:30 to 18:00 - 21 - Other - WAIT ON BJ SERV CEMENTING EQUIP, CIRC CSG WORKING PIPE ABOUT 10'.

18:00 to 20:30 - 21 - Other - RIG DOWN FRANKS FILL UP TOOL & RIG UP BJ SERV.

20:30 to 03:00 - 21 - Other - CIRC WHILE BJ MIXED SPACER & OTHER CHEMICALS.

03:00 to 05:00 - 21 - Other - TEST LINES TO 4000 PSI, 5 BBLS SALT WTR DROP TOP PLUG, PUMPED 40 BBLS OF SPACER 16 PPG, 155 BBLS OF CMT MIX AT 16.8 PPG, DROP BTM PLUG & DISP W/ 284 BBLS OF MUD @ 1760 PSI BUMP PLUG TO 2150 PSI BLEED OFF PRESSURE FLOATS HOLDING. HAUL OFF SALT WTR BASE

MUD SYS. UNLOAD 10,000 PSI BOP SYS.

DC: \$162,642

Cumm DHC:

\$1,977,559

Cumm DHC+Suspended: \$1,977.559

**Activity Date:** 6/21/2002

Current Depth:

24 Hr. Footage Made:

7702 ft.

0 ft.

Days Since Spud: 29

Operations:

Activity: 21 - Other

Weather:

05:00 to 11:00 - 21 - Other - WOC, N/D STACK EXCEPT FOR FOUR BOLTS, CLEANING MUD TANKS &

UNLOADING 4" DRL PIPE & HWP.

11:00 to 16:00 - 21 - Other - SET CSG SLIPS W/ 200,000#, CUT OFF 7" CSG & N/D DOWN BOP'S.

16:00 to 17:00 - 21 - Other - RUN TEMP LOG, TOP OF CMT APPROX 4317'. 17:00 to 18:00 - 21 - Other - N/P DOWN 5000 PSI CHOKE MANIFOLD & MOVE

18:00 to 19:30 - 21 - Other - DRESS 7" CSG OFF & INSTALL TBG HD ASSY: TCM-ET, 11" 5000 X 7 1/16" 10,000 &

TEST TBG HD TO 4600 PSI.

19:30 to 04:00 - 21 - Other - RIGGING UP 10,000 PSI BOP'S STACK.

04:00 to 05:00 - 21 - Other - WELDER FABRICATING CHOKE LINE FROM BOP'S TO CHOKE MANIFOLD.

CLEANING TANKS & TRANSFERRING OIL BASE MUD.

DC: \$90,153

Cumm DHC:

\$2,067,712

Cumm DHC+Suspended: \$2,067,712

24 Hr. Footage Made:

**Activity Date:** 6/22/2002

Current Depth:

7702 ft. 0 ft.

Days Since Spud: 30

Activity: 21 - Other

Weather:

Operations:

05:00 to 10:00 - 21 - Other - WELDING ON CHKLINE & ROTATING HD SPOOL TIGHTEN FLANGES ON CHK

10:00 to 15:00 - 21 - Other - TEST CHK MANFOLD COMPLETE FOUND ONE LEAK REPAIRED 7500#/250# 15:00 to 16:00 - 21 - Other - PU TEST PLUG TIH FOUND UPPER PIPE RAMS CLOSED CUM WAS NOT

FUNCTIONING.

16:00 to 21:00 - 21 - Other - WORKING ON ACCUMULATOR & REPAIR UPPER VALVE ON TOP DRIVE.

21:00 to 23:30 - 21 - Other - TEST CHK MANFOLD COMPLETE FOUND ONE LEAK REPAIRED 7500#/250#, UPPER PIPE RAMS, INSIDE CHOKE & KILL VALVE 250/750 PSI. WHILE TESTING HCR THREADS ON TEST PLUG

STRIPPED OUT AT 6800 PSI BLOWING DP INTO LOWER KELLY VALVE.

23:30 to 00:30 - 21 - Other - INSTALL NEW TEST PLUG & TIW VALVE, CIRC SUB LEAKED.

00:30 to 04:00 - 21 - Other - TRIED TO LOCATE ANOTHER CIRC SUB COULD NOT FIND ONE. HAD WELDER ON

LOC WELD DAMAGE TIW & CIRC SUB.

04:00 to 05:00 - 21 - Other - TEST UPPER PIPE RAMS & BTM PIPE RAMS 250/7500 PSI.

DC: \$35.574

Cumm DHC:

\$2,103,286

Cumm DHC+Suspended:

\$2,103,286

From: 6/18-2002 To: 6/25/2002

Well='CANE CREEK FEDERAL #11-1' for 6/18/2002 to 6/25/2002

**Activity Date:** 6/23/2002

Current Depth:

7702 ft.

Days Since Spud: 31

24 Hr. Footage Made:

0 ft.

Activity: 21 - Other

Weather:

Operations:

05:00 to 06:00 - 21 - Other - TEST ANN TO 3500 PSI/250 PSI TEST KELLY TO 5000 PSI/250 PSI

06:00 to 07:00 - 21 - Other - ND BLIND FLANGE ON ROTATING. NU 10" FLOW LINE FROM ROTATING HD TO

PITS.

07:00 to 08:00 - 21 - Other - RU ID MACHINE

08:00 to 12:00 - 21 - Other - HOLD SAFETY MTG. TIH W/ 4" DP OPEN ENDED. NOTE TONGS SLIP HITTING

ABUNDIO PINDRDA IN THE CHEST, SORE. NO MEDICAL ATTENTION, NO LOST TIME.

12:00 to 13:00 - 21 - Other - READJUST TONGS HEADS

13:00 to 19:00 - 21 - Other - RIH W/ 4" DP 19:00 to 19:30 - 21 - Other - REPAIR TOP DRIVE

19:30 to 21:00 - 21 - Other - POOH STANDING BACK 47 STDS IN DERRICK 21:00 to 22:00 - 21 - Other - INSTALL ROTATING HD BEARING PACK

22:00 to 03:30 - 21 - Other - MAKE UP 6" BIT, BIT SUB, AND PICK UP 111 JTS OF 4" DP

03:30 to 05:00 - 21 - Other - PICK UP 45 JTS OF HWDP

DC: \$32.999

Cumm DHC:

\$2,136,285

Cumm DHC+Suspended: \$2,136,285

**Activity Date:** 6/24/2002

......

Current Depth:

24 Hr. Footage Made:

7702 ft.

0 ft.

Days Since Spud: 32

Operations:

Weather:

Activity: 21 - Other

05:00 to 09:00 - 21 - Other - TIH W/ 4" DP 7500" 09:00 to 09:30 - 21 - Other - R/D LAY DOWN MACHINE 09:30 to 10:00 - 21 - Other - TIH W/ 4" DP - TAG CMT @ 7611'

10:00 to 11:00 - 21 - Other - DISP HOLE W/ 15.8 OBM 11:00 to 11:30 - 21 - Other - CLEAN PITS OF SALT MUD

11:30 to 13:30 - 05 - Condition Mud & Circulate - CIRC & COND MUD @ 7611'

13:30 to 14:30 - 21 - Other - TEST CSG TO 3925 PSI HELD OK. NOTE CALLED BLM JACK JOHNSON.

14:30 to 15:00 - 21 - Other - S/R & TOP DRIVE

15:00 to 19:30 - 02 - Drilling - ROTARY DRL CMT IN CSG F/ 7611' - 7702' 91' 20.2' AVG 19:30 to 22:00 - 02 - Drilling - ROTARY DRLG NEW FORMATION F/ 7702' - 7707' 5' 2.0' AVG 22:00 to 22:30 - 21 - Other - PERFORM FIT - 1100 PSI AT 7582 TVD = 18.5 PPG EMW.

22:30 to 01:00 - 21 - Other - PUMP SLUG & POOH

01:00 to 03:30 - 21 - Other - P/U BHA #5 - 2.6 DEG ABH - INSTALL AND TEST MWD

03:30 to 05:00 - 21 - Other - TIH FILLING PIPE EVERY 20 STDS.

Cumm DHC: DC: \$39,775 .....

\$2,176,060

Cumm DHC+Suspended: \$2,176,060

Weather:

**Activity Date:** 6/25/2002

Current Depth: 24 Hr. Footage Made: 7740 ft. 38 ft.

Days Since Spud: 33

Activity: 02 - Drilling

05:00 to 06:30 - 21 - Other - TIH FILLING PIPE EVERY 20 STANDS

06:30 to 13:00 - 02 - Drilling - SLD DRLG HS F/7707' - 7718' 11' 1.7'/HR AVG - 220 GPM/3300 PSI

13:00 to 17:30 - 21 - Other - INSTALL DOUBLE HP ROTATING HD BEARING ASSY - REMOVE FLOWLINE &

**INSTALL BLANK FLANGE** 

17:30 to 20:00 - 02.- Drilling - SLD DRLG HS F/7718' - 7724' 6' 2.4'/HR AVG - 220 GPM/3400 PSI - LOSING

STROKES & PRESSURE

20:00 to 23:00 - 21 - Other - RIG REPAIR - #2 PUMP CLUTCH FAILED, REPAIR SAME - #1 PUMP C/O 5 1/2" &

**INSTALL 4 1/2" LINERS** 

23:00 to 05:00 - 02 - Drilling - SLD DRLG HS F/7724' - 7740' 16' 2.7'/HR AVG - 220 GPM/3480 PSI

DC: \$71,877

Cumm DHC:

\$2,247,937

Cumm DHC+Suspended: \$2,247,937

#### **OPERATOR CHANGE WORKSHEET**

ROUTING	

1. GLH 2. CDW

3. FILE

Change of Operator (Well Sold)

The operator of the well(s) listed below has changed, effective:

Designation of Agent

#### X Operator Name Change

Merger

07-01-2002

FRUIVI: (Old Operator):	1	TO: ( New Of				
AVIARA ENERGY CORPORATION	_	HUNT PETRO				
Address: 1601 ELM STREET, STE 3400	4	Address: 1601	ELM STRE	EET, STE 34	00	
DALLAC TV 75201	4	DALLAS, TX	75201			
DALLAS, TX 75201	-	Phone: 1-(214)		···		
Phone: 1-(214)-880-8850 Account No. N5500	-	Account No.				
CA NO.	.l	Unit:	CANE CI	REEK		
		Cinc.	CHILD	CELIE		
WELL(S)	SEC TWN	API NO	ENTITY	LEASE	WELL	WELL
NAME	RNG	AFINO	NO	TYPE	TYPE	STATUS
NAME CANE CREEK FEDERAL 7-1		43-019-31363		FEDERAL		DRL
KANE SPRINGS FEDERAL 3-1		43-019-31379		FEDERAL		APD
CANE CREEK FEDERAL 11-1		43-019-31364		FEDERAL		DRL
CANE CREEK 30-1		43-019-31365		FEDERAL		APD
Olive Olderson						
						<u> </u>
						<u> </u>
					<u> </u>	<u> </u>
			<u> </u>			<u> </u>
OPERATOR CHANGES DOCUMENTATION  Enter date after each listed item is completed  1. (R649-8-10) Sundry or legal documentation was received	from the FOF	RMER operator	on:	07/15/2002	<u>2</u>	
2. (R649-8-10) Sundry or legal documentation was received	from the NEV	W operator on:	08/07/200	2		
3. The new company has been checked through the <b>Departn</b>	nent of Comn	nerce, Division	of Corpora	itions Datab	ase on:	08/07/200
4. Is the new operator registered in the State of Utah:	YES	Business Num	ber:	56883-014	3	
5. If <b>NO</b> , the operator was contacted contacted on:	N/A	_				
6. (R649-9-2) Waste Management Plan received on:	IN PLACE	· <u> </u>				

Federal and Indian Lease Wells: The BLM and or the BIA has approved the merger, name change,

07/01/2002

or operator change for all wells listed on Federal or Indian leases on:

7.	Federal and Indian Units:  The BLM or BIA has approved the successor of unit operator for wells listed on:  07/01/2002
8.	Federal and Indian Communization Agreements ("CA"):  The BLM or BIA has approved the operator for all wells listed within a CA on:  N/A
9.	Underground Injection Control ("UIC")  The Division has approved UIC Form 5, Transfer of Authority to Inject, for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on:  07/08/2002
DA	TA ENTRY:
1.	Changes entered in the Oil and Gas Database on: 08/07/2002
2.	Changes have been entered on the Monthly Operator Change Spread Sheet on: 08/07/2002
3.	Bond information entered in RBDMS on: N/A
4.	Fee wells attached to bond in RBDMS on:  N/A
Sī	ATE WELL(S) BOND VERIFICATION:
1.	State well(s) covered by Bond Number:  N/A
	DERAL WELL(S) BOND VERIFICATION: Federal well(s) covered by Bond Number:  CO-1274
IN	DIAN WELL(S) BOND VERIFICATION:
1.	Indian well(s) covered by Bond Number:  N/A
FI	E WELL(S) BOND VERIFICATION:
1.	(R649-3-1) The <b>NEW</b> operator of any fee well(s) listed covered by Bond Number  N/A
2.	The <b>FORMER</b> operator has requested a release of liability from their bond on:  N/A  The Division sent response by letter on:  N/A
	ASE INTEREST OWNER NOTIFICATION:  R649-2-10) The FORMER operator of the fee wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on:  N/A
C	MMENTS:

# HNT PETROLEUM (AEC), IN1601 Elm Street, Suite 3400 Dallas, Texas 75201

July 11, 2002

State of Utah
Department of Oil, Gas & Minerals
1594 West N. Temple, Suite 1210
Salt Lake City, Utah 84114-5801

Attn: Mr. Jim Hamilton

Re: Travelers Bond No. 103860066

Dear Sir:

This is to advise you that Aviara Energy Corporation has changed its name to Hunt Petroleum (AEC), Inc., effective July 1, 2002. Attached is a Surety Rider to Travelers Bond #103860066 (which replaced CNA Bond No. 159209096) and a copy of the Surety Bond on State of Utah Form 4A currently on file with the State of Utah, Department of Natural Resources.

If you have any questions please give me a call at (214) 880-8916.

Yours very truly,

Mary Melvin
Mary Melvin
Legal Assistant

#### attachments

cc: Max Gardner (w/enc.)

Donny Worthington (w/enc.) Gerald Phillips (w/enc.)

Receipt acknowledged this \_\_\_ day of July 2002.

STATE OF UTAH, Department of Oil, Gas & Minerals

By: \_\_\_\_\_

RECEIVED

JUL 15 2002

DIVISION OF OIL, GAS AND MINING



# United States Department of the Interior

#### BUREAU OF LAND MANAGEMENT Colorado State Office 2850 Youngfield Street Lakewood, Colorado 80215-7076

IN REPLY REFER TO. 3106 (MM)

July 22, 2002

NOTICE

Hunt Petroleum (AEC), Inc. 1601 Elm Street, Suite 3400 Dallas, TX 75201

Oil and Gas

#### Name Change Recognized

Acceptable evidence was filed and accepted by this office concerning the name change of Aviara Energy Corporation to Hunt Petroleum (AEC), Inc. with Hunt Petroleum (AEC), Inc. being the surviving entity. For our purposes, the name change was recognized effective July 1, 2002 the date of acceptance by the Secretary of the State of Delaware.

A rider changing the name of the principal on Nationwide bond number 159209244 (BLM Bond CO-1274) previously held by Aviara and issued by Continental Casualty Company, was changed to Hunt Petroleum (AEC), Inc. effective July 12, 2002.

The oil and gas lease files identified on the enclosed Exhibit A, supplied by Hunt Petroleum (AEC), Inc. were updated to reflect the new name. We have not abstracted the lease files to determine if the entities affected by the name change hold an interest in the leases identified nor have we attempted to identify leases where the entity is the operator on the ground maintaining no vested record title or operating rights interests. We are notifying the Mineral Management Services (MMS) and applicable Bureau of Land Management (BLM) Field Offices of the name change by copy of this notice. If our field offices require additional documentation for changes of operator, they will contact you.

If you identify additional leases where the affected parties maintain an interest, please contact this office and we will document the files under our jurisdiction with a copy of this Notice. If the leases are under the jurisdiction of another State Office, we will notify them.

If you have any questions concerning this correspondence, please call Martha Maxwell at (303)239-3768.

TOR Beverly Derringer

Chief, Fluid Minerals Adjudication

Exhibit A sent to Eastern SO, New Mexico SO, Montana SO, Utah SO, Wyoming SO & MMS-MRM, MS357B1, PO Box 5760, Denver, CO 80217

Decision Letter sent to All State Offices via BLM\_Fluids\_Forum

# STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES

5. LEASE DESIGNATION AND SERIAL NUMBER: DIVISION OF OIL, GAS AND MINING 6. IF INDIAN, ALLOTTEE OR TRIBE NAME: **SUNDRY NOTICES AND REPORTS ON WELLS** 7. UNIT or CA AGREEMENT NAME: Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals. 8. WELL NAME and NUMBER: 1. TYPE OF WELL OIL WELL GAS WELL OTHER See attachment 9. API NUMBER: 2. NAME OF OPERATOR: Hunt Petroleum (AEC), Inc. 10. FIELD AND POOL, OR WILDCAT: PHONE NUMBER: 3. ADDRESS OF OPERATOR: 1601 Elm Streeten Suite 3400 Dallas, TXZH75201 214-880-8855 4. LOCATION OF WELL COUNTY: FOOTAGES AT SURFACE: STATE: QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: **UTAH** CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA 11. TYPE OF ACTION TYPE OF SUBMISSION REPERFORATE CURRENT FORMATION ACIDIZE DEEPEN NOTICE OF INTENT SIDETRACK TO REPAIR WELL (Submit in Duplicate) FRACTURE TREAT ALTER CASING TEMPORARILY ABANDON Approximate date work will start: CASING REPAIR **NEW CONSTRUCTION** OPERATOR CHANGE **TUBING REPAIR** CHANGE TO PREVIOUS PLANS VENT OR FLARE PLUG AND ABANDON CHANGE TUBING WATER DISPOSAL SUBSEQUENT REPORT PLUG BACK CHANGE WELL NAME (Submit Original Form Only) WATER SHUT-OFF PRODUCTION (START/RESUME) **CHANGE WELL STATUS** Date of work completion: RECLAMATION OF WELL SITE OTHER: COMMINGLE PRODUCING FORMATIONS **RECOMPLETE - DIFFERENT FORMATION** CONVERT WELL TYPE 12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. Change of company from Aviara Energy Inc. to Hunt Petroleum (AEC), Inc. effective July 1, 2002. Agent NAME (PLEASE PRINT) DATE August 6, 2002

(This space for State use only)

RECEIVED

AUG 0 7 2002

DIVISION OF OIL, GAS AND MINING

api	well_name	section	township	range	ll_status_m
4301931310	KANE SPRINGS FED 27-1	27	250S	190E	P
4301931324	KANE SPRINGS FED 19-1A	19	260S	200E	Р
4301931325	KANE SPRINGS FED 28-1	28	250S	190E	S
4301931331	KANE SPRINGS FED 10-1	10	250S	180E	Р
4301931332	KANE SPRINGS FED 20-1	20	260S	190E	S
4301931334	KANE SPRINGS FED 25-19-34-1	34	250S	190E	Р
4301931363	CANE CREEK FEDERAL 7-1	07	250S	190E	DRL
4301931364	CANE CREEK FED 11-1	11	260S	190E	DRL
4301931365	CANE CREEK 30-1	30	260S	200E	APD
4301931379	KANE SPRINGS FED 3-1	03	260S	190E	APD
4303730572	<b>GOVT EVELYN CHAMBERS 1</b>	06	310S	240E	S
4303730612	<b>GOVT EVELYN CHAMBERS 2</b>	05	310S	240E	S
4304731768	COWDEN 31-3-C	31	060S	210E	S
4304731769	FEDERAL 33-6-F	33	060S	210E	Р
4304731787	FEDERAL 33-8-N	33	060S	210E	Р
4304731804	FEDERAL 33-3-J	33	060S	210E	S
4304731844	FEDERAL 33-7-L	33	060S	210E	Р
4301931341	KANE SPRINGS 16-1	16	250S	180E	Α
4304731776	ALTA 5-1-B	05	070S	210E	Р
4304731843	ALTA 5-2-C	05	070S	210E	Р

# **Hunt** \* etroleum Corporation

1601 Elm St., Suite 3400 Dallas, TX 75201 (214) 880-8800

# **Daily Activity Report**

Report Date : Tuesday, June 11, 2002

AFE#: 022012D

**AFEDHC:** \$2,176,042

**AFECWC:** \$2,176,042

AFE Type: DEV

WI: 0.572829 NRI

24 Hr. Footage Made:

Page 1 of 3

From: 6/4/2002

JINTIULIVIAME

To: 6/11/2002

Well='CANE CREEK FEDERAL #11-1' for 6/4/2002 to 6/11/2002

#### DAILY DRILLING REPORT

Well Name: CANE CREEK FEDERAL #11-1

Operator: AVIARA ENERGY CORPORATION

Loc:

County: GRAND, UT

Field: KANE SPRINGS

STR: 11 - 265 - 19E.

API Code: 43-0/9-3/364

**Proposed Depth:** 

Total Depth:

0 ft.

9339 ft.

Activity Date: 6/4/2002

**Spud Date:** 5/23/2002

Rig Rel Date:

**Current Depth:** 5850 ft.

710 ft.

Days Since Spud: 12

Activity: 02 - Drilling

Weather:

Operations:

05:00 to 06:00 - 02 - Drilling - ROTARY DRLG F/ 5140' - 5175', 35' 35'/HR.

06:00 to 06:30 - 21 - Other - CHANGE SCREENS ON SWACO DRYER - SCREENS DAMAGED DUE TO CLEANING

DRYER W/SHOVELS.

06:30 to 08:00 - 02 - Drilling - ROTARY DRLG F/ 5175' - 5232', 57' 38'/HR. 08:00 to 09:00 - 02 - Drilling - SLIDE DRLG @ 180M F/ 5232' - 5250', 18' 18'/HR. 09:00 to 10:30 - 02 - Drilling - ROTARY DRLG F/ 5250' - 5327', 77' 51'/HR. 10:30 to 11:30 - 02 - Drilling - SLIDE DRLG @ 225M F/ 5327' - 5347', 20' 20'/HR. 11:30 to 12:30 - 21 - Other - RIG REPAIR - REPLACE VALVE CAP GASKET 12:30 to 20:00 - 02 - Drilling - ROTARY DRLG F/ 5327' - 5731', 404' 54'/HR.

20:00 to 00:00 - 21 - Other - CHANGE SCREENS ON SWACO DRYER & CONTRACTOR SHAKERS. 00:00 to 02:00 - 02 - Drilling - ROTARY DRLG F/ 5731' - 5782', 51' 25'/HR. LOSING PUMP PRESSURE.

02:00 to 03:30 - 21 - Other - RIG REPAIR - REMOVE DEBRIS FROM PUMP VALVES.

03:30 to 05:00 - 02 - Drilling - ROTARY DRLG F/ 5782' - 5850', 68' 46'/HR.

DC: \$43,426

Activity: 02 - Drilling

Activity Date: 6/5/2002

Cumm DHC:

\$1,041,929

Cumm DHC+Suspended: \$1,041,929

**Current Depth:** 

24 Hr. Footage Made:

6370 ft.

520 ft.

Days Since Spud: 13

Weather:

Operations:

05:00 to 09:00 - 02 - Drilling - ROTARY DRLG F/ 5850' - 5920' 70' 18'/HR. 09:00 to 10:00 - 21 - Other - SHAKERS & CUTTINGS DRYER OVER-LOADED. CLEAN SHAKERS.

10:00 to 12:30 - 02 - Drilling - ROTARY DRLG F/ 5920' - 5992' 72' 48'/HR. 12:30 to 13:00 - 21 - Other - CHANGE SCREENS ON SWACO CUTTINGS DRYER. 13:00 to 17:30 - 02 - Drilling - ROTARY DRLG F/ 5992' - 6175' 183' 40.6'/HR. 17:30 to 18:30 - 02 - Drilling - SLIDE DRLG F/ 6175' - 6200' 25' 25'/HR.

18:30 to 20:00 - 21 - Other - UNSTOP RISER BETWEEN PIT COMPARTMENTS. 20:00 to 22:00 - 02 - Drilling - ROTARY DRLG F/ 6200' - 6239' 39' 19.5'/HR. 22:00 to 23:00 - 02 - Drilling - SLIDE DRLG F/ 6239' - 6254' 15' 15'/HR. 23:00 to 05:00 - 02 - Drilling - ROTARY DRLG F/ 6254' - 6370' 116' 19.5'/HR.

DC: \$44,798

Cumm DHC:

\$1,086,727

Cumm DHC+Suspended: \$1,086,727

### DAILY DRILLING REPORT

From: 6/47z002

To: 6/11/2002

Well='CANE CREEK FEDERAL #11-1' for 6/4/2002 to 6/11/2002

Activity Date: 6/6/2002

**Current Depth:** 

6564 ft.

Days Since Spud: 14

24 Hr. Footage Made:

194 ff

Activity: 21 - Other

Weather:

Operations:

06:00 to 08:30 - 02 - Drilling - ROTARY DRL F/ 6380 - 6458' 78' @ 52'/HR. 08:30 to 09:30 - 21 - Other - CHANGE SHAKER SCREENS.

CONFIDENTIAL

09:30 to 11:00 - 21 - Other - WORK ON 1# PUMP THROTTLE.

11:00 to 12:00 - 02 - Drilling - SLIDE DRL F/ 6458 - 6478' 20' @ 20'/HR. 12:00 to 14:00 - 02 - Drilling - ROTARY DRL F/ 6458 - 6564, 86' @ 43'/HR.

14:00 to 16:00 - 21 - Other - WORK ON SHAKER SCREENS.

16:00 to 18:00 - 21 - Other - CIRC HOLE BUILDING MUD WT F/ 14 T/ 14.3 PPG, CHECK WTR/OIL RATIO HAD A

INCR IN WTR 82/18 TO 77/23 SHUT DOWN PUMP TO CK FLOW, NO FLOW. 18:00 to 19:00 - 21 - Other - CIRC HOLE BUILDING MUD WT F/ 14 T/ 14.3 PPG.

19:00 to 19:30 - 21 - Other - SHUT DOWN PUMP TO CK FLOW, WELL FLOWING ABOUT A 3" STREAM.

19:30 to 20:30 - 21 - Other - SHUT WELL IN TO MONITOR ANN PRESS IN 5 MIN PRESS UP TO 350 PSI, IN 10 MIN TO 500 PSI AND IN 15 MIN TO 800 PSI, CHECK OIL/WTR RATIO HAD AN INCR 53 OIL 47 WTR. FLOWING

SALT WTR FROM CLASTIC 15.

20:30 to 21:00 - 21 - Other - GETTING SHUT-IN DRL PIPE PRESS 260 PSI.

21:00 to 06:00 - 21 - Other - RIG UP & PUMP CONTAMINATED MUD FROM SETTLING PIT & SAND TRAP TO

STORAGE TANK.

DC: \$62,115

Cumm DHC: \$1,148,842

Cumm DHC+Suspended: \$1,148,842

Activity Date: 6/7/2002

Current Depth: 24 Hr. Footage Made :

6564 ft. 0 ft.

Days Since Spud: 15

Activity: 05 - Condition Mud & Circ

Weather:

Operations:

05:00 to 18:00 - 21 - Other - CLEANING SETTLING PIT & SAND TRAP W/ 5 GAL BUCKETS, WORK PIPE EVERY 15 MIN. MONITOR WELL PRESS 250 PSI ON DP & 850 PSI ON ANN. FINALLY GOT A VACCUM TRUCK TO

HELP CLEAN MUD TANK.

18:00 to 21:00 - 21 - Other - WORK DP EVERY 15 MIN. MONITOR WELL PRESS, RIG UP TRANSFER PUMP & LINE FROM SAND TRAP TO FRAC TANK TO MOVE CONTAMINATED MUD WHEN START TO CIRC WELL. 21:00 to 05:00 - 05 - Condition Mud & Circulate - CIRC & COND MUD OIL/WTR RATIO F/ 73/27 TO 85/15, BUILDING MW F/11.5 TO KILL WT OF 15.2 PPG. WORK DP & MONITOR WELL PRESS DP 150 PSI & CSG 850 PSI.

CHANGE LINER IN #2 PUMP F/5 1/2" TO 6".

DC: \$83,265

Cumm DHC: \$1,232,107

Cumm DHC+Suspended: \$1,232,107

Activity Date: 6/8/2002

Current Depth: 24 Hr. Footage Made :

6564 ft. 0 ft.

Days Since Spud: 16

Activity: 21 - Other

Weather:

Operations:

05:00 to 15:00 - 21 - Other - COND MUD IN PITS OIL/WTR RATIO F/ 73/27 TO 85/15, BUILDING MUD WT FROM 11.5 TO KILL WT OF 15.2 PPG. WORK DRL PIPE & MONITOR WELL PRESSURE DRL PIPE 150 PSI & CSG 850 PSI. RECEIVED TWO 400 BBL UPRIGHT MUD STORAGE TANKS, R/U ONE TO DOWNSTREAM SIDE OF #2 HYDRAULIC CHOKE TO RECEIVE CONTAMINATED MUD FROM HOLE.

15:00 to 17:00 - 21 - Other - CIRC 15.2 PPG KILL MUD ON CHOKE. 111 BBLS, 1770 STRKS TO BIT - TTL CIRC 434 BBLS, 6929 STKS. RTNS TO UPRIGHT STORAGE FOR DISPOSAL. PUMPED 7210 STKS OR 453 BBLS &

RAN OUT OF MUD. SICP 300# & 400# IN 5 MIN.

17:00 to 20:00 - 21 - Other - MONITOR & RECORD WELL PRESSURES - TRANSFER MUD TO SLUGGING TANK WT UP TO 15.2 PPG & PUMP DOWN DRILL PIPE. PUMP TTL 175 STROKES D.P. PRESSURE 1680/ CSG 100

PSI, SHUT DOWN PUMP 400 PSI DP & 200 PSI CSG. IN 15 MIN DP 320 PSI / CSG 280 PSI.

20:00 to 05:00 - 21 - Other - ADD 385 BBLS OF VERSADRIL TO ACTIVATE SYS. WEIGHT UP SYS FROM 10 PPG TO 15.2 PPG. FINAL VOLUME WHEN WEIGHTED TO 15.2 WILL MAKE ABOUT 700 BBLS. SHUT IN WELL PRESSURES DP - 100 PSI - CSG 300 PSI. MUD WEIGHT @ 0400 - 14.8 PPG.

DC: \$45,163

Cumm DHC:

\$1,277,270

Cumm DHC+Suspended: \$1,277,270

From : 6/4/≥d02

To: 6/11/2002

Well='CANE CREEK FEDERAL #11-1' for 6/4/2002 to 6/11/2002

Activity Date: 6/9/2002

CONFIDENTIAL

**Current Depth:** 

6564 ft.

Days Since Spud: 17

24 Hr. Footage Made:

0 ft.

Activity: 21 - Other

Weather:

Operations:

05:00 to 06:00 - 21 - Other - ADD 385 BBLS OF VERSADRIL TO ACTIVATE SYS. WT. UP SYS FROM 10 PPG TO

15.2 PPG. SHUT IN WELL PRESSURES DP-100 PSI - CASING-300 PSI.

06:00 to 14:00 - 21 - Other - CIRC 15.2 PPG KILL MUD ON CHOKE A TTL 122 BBLS. SHUT WELL IN TO RUN TEST ON SAMPLE. MUD WT IN SETTING TANK DOWN TO 14.2 PPG. CIRC & COND WHILE INCREASE MUD

WT TO 15.6 PPG. DP/350 PSI - CASING 400 PSI.

14:00 to 15:00 - 21 - Other - CIRC 15.6 PPG KILL MUD ON CHOKE. PUMPED 3630 STROKES OR 228 BBLS TTL -

RETURNS 14.2 TO 13.8 PPG. SICP 360# & 400# IN 5 MIN. SIDPP 425 & 380 IN 5 MIN.

15:00 to 17:30 - 21 - Other - MONITOR WELL & RECORD PRESSURES. BUILD MUD WT TO 16.0 PPG - MAX

SICP 450.

17:30 to 18:00 - 21 - Other - R/U FLOOR TO STRIP SHOE. REDUCE CLOSING PRESSURE TO 350# ON

ANNULAR, RE-DRESS MUD BUCKET.

18:00 to 21:00 - 21 - Other - STRIP 24 STANDS OF DP TO CASING SHOE 4300'.

21:00 to 05:00 - 21 - Other - CIRC & COND MUD TO TRANSFER TO FRAC TANKS FOR STORAGE. CSG

PRESSURE 420 PSI.

DC: \$64,269

Cumm DHC:

\$1,341,539

Currim DHC+Suspended: \$1,341,539

**Activity Date:** 6/10/2002

.....

24 Hr. Footage Made:

**Current Depth:** 

6564 ft. 0 ft.

Days Since Spud: 18

Activity: 21 - Other

Weather:

Operations:

05:00 to 09:00 - 21 - Other - COND MUD IN RIG PITS TO TRANSFER TO FRAC TANKS FOR STORAGE. MONT

WELL & RECORD PRESSURES. MAX SICP 450.

09:00 to 15:00 - 21 - Other - TRANSFER MUD F/ ACTIVE SYSTEM TO UPRIGHT STORAGE TANKS.

15:00 to 21:00 - 21 - Other - CLEANING MUD TANKS.

21:00 to 05:00 - 21 - Other - MOVE IN 10# BRINE WATER TO PRE-MIX TANK & ADD GELS AND TRANSFER TO

**ACTIVE SYSTEM.** 

DC: \$35,867

Cumm DHC:

\$1,377,406

Cumm DHC+Suspended:

\$1,377,406

**Activity Date: 6/11/2002** 

Current Depth: 24 Hr. Footage Made:

6564 ft. 0 ft.

Days Since Spud: 19

Activity: 21 - Other

Weather:

Operations:

05:00 to 21:00 - 21 - Other - MOVE IN 10# BRINE WTR TO PRE-MIX TANK AND ADD GELS & TRANSFER TO

ACTIVE SYS FOR SURF VOLUME. BUILT 808 BBLS OF 16 PPG.

21:00 to 22:00 - 21 - Other - CIRC 16 PPG SALT MUD ON CHOKE TO DISPL OBM FROM SHOE @ 4300'. AT 55 SPM W/ 725# DPP & 700# CP ON 1/4 CHOKE. PUMP 29 BBLS W/O RETURNS, DPP FELL TO 400# W/ 700# CP. OPEN CHOKE TO 3/8 RETURNS INCREASED BUT DPP CONT TO DROP. PUMPED 72 BBLS TO DISPL DRILL STRING - 160# DPP AND 100# CP. OPEN CHOKE TO 1/2. THEN @ 113 BBLS PUMPED, 100# DDP AND 30 # CP. PUMPED TTL OF 161 BBLS W/ 120# DPP & 0 CP. SHUT DOWN PUMP & CWI. 5 MIN 110 PSI DP 450 CP.

15 MIN DP 540 CP. 30 MIN 640 CP.

22:00 to 05:00 - 21 - Other - MONITOR WELL @ 0430 A.M. 875 PSI ON CSG.

DC: \$67.361

\_\_\_\_\_\_

Cumm DHC:

\$1,444,767

Cumm DHC+Suspended:

\$1,444,767

Form 3160-4 (August 1999)

## TITED STATES DEPART OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB NO. 1004-0137 Expires: November 30, 2000

5. Lease Serial No. WELL COMPLETION OR RECOMPLETION REPORT AND LOG <u>UTU-6597</u>2 6. If Indian, Allotee or Tribe Name la. Type of Well X Oil Well Gas Well Dry Other Plug Back Diff.Resvr,. New Well Work Over Deepen 7. Unit or CA Agreement Name and No. b. Type of Completion: Cane Creek Unit 8. Lease Name and Well No. 2. Name of Operator Cane Creek Federal #11-1 Aviara Energy Corporation 3a. Phone No. (include area code) 3. Address 9. API Well No. P.O. Box 1350, Houston TX 77251-1350 713-871-3400 43-019-31364-00 4. Location of Well (Report location clearly and in accordance with Federal requirements)\* 10. Field and Pool, or Exploratory
Wildcat 2220' FNL & 2060' FWL of Sec. 11. T26S, R19E 11. Sec., T., R., M., or Block and Survey of Area 11, T26S, R19E At top prod. interval reported below 2350' FNL & 2322 FWL of Sec. 11, T26S, R19E 12. County or Parish 13. State Utah 3766' FNL & 3989' FWL of Sec. 11, T26S, R19E Grand At total depth 17. Elevations (DF, RKB, RT, GL)\* 16. Date Completed 14. Date Spudded 15. Date T.D. Reached D&A Ready to Prod. DF 6168.6' GL 6147' KB 6169.6' 7/15/02 7/11/02 5/23/02 NA 20. Depth Bridge Plug Set: MD 9893' 19. Plug Back T.D.: MD 18. Total Depth: MD TVD 7554 21. Type Electric & Other Mechanical Logs Run (Submit copy of each) MWD-8-6-02

1 THOUGH 6.1 - VERT - HOREZ-8-6-02

1 atomalog Annay (Caldon Co. Bornhall Co. Bor X No Yes (Submit analysis) Was well cored? Yes (Submit report X No Was DST run Laterolog Array, Caliper-GR Borehole Compensated Sonic Yes (Submit Directional Survey? No 23. Casing and Liner Record (Report all strings set in well) Stage Cementer No.of Sks. & Slurry Vol. Amount Pulled Cement Top\* Top (MD) Bottom (MD) Size/Grade Wt.(#ft.) Hole Size Depth Type of Cement None 193 Surface 749' NA 566 13-3/8" K-55 54.5 Surface None 278 Surface 4300 NA 878 Surface N-80 40 9-5/8" 155 4300° None 846 7702 7" J-55 32 Surface 24. Tubing Record Packer Depth (MD) Depth Set (MD) Depth Set (MD) Packer Depth (MD) Depth Set (MD) Packer Depth (MD) 2-7/8" 7537 26. Perforation Record 25. Producing Intervals No. Holes Perf. Status Perforated Interval Size **Formation** Тор Bottom Open Hole Latera 7702" - 9892" MD A) 7680' MD Cane Creek B) C) 2 5 m 12" D) 27. Acid, Fracture, Treatment, Cement Squeeze, Etc. CONFIDENTIAL Amount and Type of Material Depth Interval PERICO EXPIRED AUG 0 6 2002 ON 2-15-03 DIVISION OF OIL, GAS AND MINING 28. Production - Interval A Production Method Gas Date First Test Hours Gravity NA Gravity NA BBL NA BBL 138 Production 7715702 <sup>D</sup>//15/02 Tested Flowing Water Gas: Oil Well Oil Gas Choke Tbg. Csg. MCF BBL Ratio Hr. BBL 509 Shut-in -- Building Facilities 14/64 Flwg. 2900 0 560 28a. Production-Interval B **Production Method** Water BBL Gas Date First Gas MCF Oil Hours Test Test Gravity Production Gravity BBL Tested Produced Gas: Oil Well Oil Gas Csg. Choke Tbg. BBL Ratio Status Hr. Size Press. Flwg.

28b. Produ	ction - Inte	erval C						(		
Date First Produced	Test Date	Hours Tested	Test Production	BBL	Gas MCF	Water BBL	Oil Gravity	Gas Gravity	Production Method	
Choke Size	Tbg. Press. Flwg.	Csg. Press.	24 Hr>	Oil BBL	Gas MCF	Water BBL	Gas; Oil Ratio	Well Status		
28c. Product	ion-Interval	D					<u> </u>			
Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity	Gas Gravity	Production Method	
Choke Size	Tbg. Press. Flwg.	Csg. Press.	24 Hr.	Oil BBL	Gas MCF	Water BBL	Gas; Oil Ratio	Well Status		
29. Dispos	ition of Ga	s (Sold, used	for fuel, vented	etc.)		Flare	ed .	···•		
Show all	limportant	t zones of po	clude Aquifers) prosity and con tested, cushic	tents the	ereof: Co	red intervol open,	als and all drill-ster flowing and shut-i	n	tion (Log) Markers	
Forma	tion	Тор	Bottom		Descripti	ions, Cont	ents. etc.		Name	Тор
				<u> </u>				Donad.		Meas. Depth
Cane (	Creek	7587 <i>°</i>	7667' est	:  Dr	111ea H	ior 1 zon	tal Lateral	Parad	ox Salt	4261'
								and	all other Clastic salt tops see ached report)	
0-	il conta	aminated	ugging procedu with oil b duction wh	ased r				an not be	accurately obtained	d
1)Elect	trical/Mecl		(1 full set req'd	_	2)Geolog 6.Core	ic Report Analysis	3.DST Report	Direction	onal Survey	
34. I hereb	y certify the	hat the forego	ing and attache	d inform	ation is co	mplete an	d correct as determin	ned from all av	ailable records (see attached	instructions)*
Name (	please prin	i) Vict	toria Guid	CY			Title	e Regula	atory Coordinator	- value and the same
Signatu	re	Victor	ia Ll	uid	ly		Dat	e <u>7/19</u> /	/02	
	·			6	1					
P'41. 10 Y7		- 1001 : 17	M. 40 TI 0 0		212 - 1	- !•*	. 6	i	116.11v to make to any day of	ment or agreem afail - TI 'e
							e for any person kno natter within its juris		ilifully to make to any depart	ment of agency of the Unite

## MULTISHOT, INC. CORPUS CHRISTI, TEXAS

JOB NUMBER: 0217505463

WELL NAME: CANE CREEK 11-

## INRUN SURVEY BY MINIMUM CURVATURE

			1 /0	INCL	BEARING	COORDII	NATES	D-LEG		ATION DISPLACEMENT
MEAS.	VERT.	VERT.	L/R PROP.	INCL	AZIMUTH	LATITUDE	DEPARTURE	/100	/CL	DISP. DIRECTION
DEPTH	DEPTH	SECT.	PRUP.		MAINVIII	7011111				
	***	0 91	0.070	00.25	018.80	0,21 N	0.07 E	0.25	0.25	0.22 AT 018.80
100.0	100.00	0.21	-0.073	00.25	281.25	0.46 N	0.07 W	0.38	0.38	0.46 AT 350.85
200.0	200.00	0.46	-0.435	00.25	222.69	0.34 N	0.44 V	0.24	0.24	0.55 AT 387.82
300.0	300.00	0.34 0.13	-0.797	00.25	258.14	0.13 N	0.80 W	0.15	0.15	0.81 AT 279.45
400.0	400.00	0.13	-1,227	00.25	264.58	0.07 N	1,23 W	0.03	0.03	1.23 AT 273.13
500.0	500.00	. 0.01	-1,441	00.20	201700					= .m 071 DE
COO A	600,00	0.05	-1,445	00.00	000.00	0.05 N	1.44 W	0.25	0.25	1.45 AT 271.85
600.0	700.00	-0.11	-1.592	00.25	222.47	0.11 S	1.59 ₩	0.25	0.25	1.60 AT 265.89
700.8		-0.11	-1,630	00.25	149.92	0.46 S	1.63 W	0.30	0.30	1.69 AT 254.11
0.008	80.00	-0.46	-1.625	00.25	331.36	0.46 S	1.63 W	0.50	0.50	1.69 AT 254.15
900.0	899.99 999.99	-0.40	-1,776	00.25	347.81	0.06 S	1.78 W	0.07	0.07	1.78 AT 268.17
1000.0	333.33	-0.00	-31174		•,				A 95	1.67 AT 279.89
1100.0	1039.99	0.29	-1,647	00.25	053.25	0.29 N	1.65 W	0.27	0.27	1.48 AT 293.94
1200.0	1199.99	0.60	-1.354	00.25	032.70	0.60 N	1.35 W	0.09	0.09	1.43 AT 310.95
1300.0	1299.99	0.94	-1.082	00.25	045.14	0.94 N	1.08 W	0.05	0.05	1.44 AT 328.38
	1399.99	1,23	-0.756	00.25	051.59	1.23 N	0.76 W	0.03	0.03	1.44 AT 320.30 1.29 AT 341.27
1400.0 1500.9	1499.99	1.23	-0.416	08.25	129.03	1.23 N	0.42 W	0.31	0.31	1.29 Al 541.47
1900.0	1433.33	1150	<b>4</b>							1.25 AT 355.50
1600.0	1599.99	1.25	-0.098	00.25	042.70	1,25 N	0.10 W	0.34	0.34	1.47 AT 010.41
1700.0	1699.99	1.44	0.265	80.25	081.15	1.44 N	0.27 E	0.16	0.16	1.69 AT 024.07
1800.0	1799.99	1.54	0.689	00.25	072.60	1.54 N	0.69 E		0.04 0.27	2,24 AT 033.86
1900.0	1899.99	1.86	1.250	00.50	054.04	1.86 N	1.25 E			3.31 AT 035.41
2000.0	1999,98	2.69	1.916	00.75	028.48	2.69 N	1.92 B	0.37	0.37	3.31 Mt 400.11
2000.0	1333,30	2.00							0.43	4.55 AT 038.10
2100.0	2099.97	3.58	2.805	00.75	061.93	3.58 N			0.43 0.38	5.80 AT 840.06
2200.0	2199.96	4.44		00.75	032.37	4.44 N			0.02	7.10 AT 038.78
2308.0	2299.95	5.54		00.75		5.54 N			0.25	8.62 AT 038.05
2400.0	2399.94	6.79		01.00		6.79 N			0.16	10.36 AT 038.37
2500.0	2499.93	8.12		01.00	044.71	8,12 N	6.43 I	0.10	0110	
2000.0	• • • • • • • • • • • • • • • • • • • •							8 9.24	0.24	12.10 AT 038.31
2690.0	2599.91	9.49	7.499	01.00	931.15	9.49 N				14.05 AT 037.27
2700.0	2699.89	11.18		01.25		11.18		_		16.22 AT 037.06
2800.0	2799.87	12.94				12.94	•			18.39 AT 036.99
2900.0	2899.85	14.69	11.065	01.25		14.69				20.78 AT 036.29
3000.0			12.298	01.50	030.06	16.75	y 12.30	B V.20		
9900.0		= -				10 61 1	N 13.53	E 0.25	0.25	23.17 AT 035.74
3100.0	3099.79	18.8	1 13.534							25.56 AT 035.21
3200.0				4 01.5				~		28,37 AT 034.46
3200.0				5 01.7						31.38 AT 033.54
3400.0							••	-		34.18 AT 032.70
3500.0			•		0 024.54	28.76	N 10.41	n 0.40	, 3,50	
3300.	, 9100.00					. 41.11	N 19.50	E 0.30	0.30	36.96 AT 031.84
3600.	3599.59	31.4	0 19.49	7 01.7	5 018.63	31.40	14 10:00	/-		CENTER

## RECEIVED

AUG 0 6 2002

DIVISION OF OIL, GAS AND MINING

## MULTISHOT, INC. CORPUS CHRISTI, TEXAS

JOB NUMBER: 0217505463

WELL NAME: CANE CREEK 11-1

LBOM : CHAE CREEK

## INRUN SURVEY BY MINIMUM CURVATURE

MBAS.	VBRT.	VERT.	L/R	INCL	BEARING	COORDI	NATES	D-LEG	D-LEG	STATION DISPLACEMENT
Depth	DEPTH	SECT.	PROP.		AZIMUTH	LATITUDE	DEPARTURE	/100	/CL	DISP. DIRECTION
3700.0	3699.55	34.26	20.550	01.75	021.73	34.26 N	20.55 E	0.22	0.09	39.95 AT 030.95
3800.0	3799.50	37.17	21.455	01.75	012.83	37.17 N	21.45 E		0.27	42.92 AT 029.99
3900.0	3899.45	40.10	22.314	01.75	019.92	40.10 N	22.31 E		0.22	45.89 AT 029.10
4000.0	3999.41	43.04	23.073	01.75	009.02	43.04 N	23.07 E		0.33	48.83 AT 028.20
4100.0	4099.36	46.04	23.646	01.75	012.59	46.04 N	23.65 E	0.02	8.11	51.75 AT 027.19
4200.0	4199.31	49.02	24.290	01.75	011.78	49.02 N	24.29 E		0.02	54.71 AT 026.36
4250.0	4249.29	50.50	24.669	01.75	016.97	50.50 N	24.67 E		0.16	56.20 AT 026.04

THE HORIZONTAL DISPLACEMENT AT THE DEPTH OF \*\*\*\*\* 56.20 FEET AT 026.04 4250.0 FEET EQUALS

Form 3160-5 (November 1994)

### UNTIED STATES DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT**

#### SUNDRY NOTICES AND REPORTS ON WELLS

FORM APPROVED Budget Bureau No. 1004-0135 Expires July 31, 1996

5	I ASSA	Serial	No
J.	Loaso	<b>SCLIM</b>	110

11	TII	-6	5	đ.	72

6. If Indian. Allottee or Tribe Name

Do not use this form for abandoned well. Use Form				6. If finding, Another of Tribe	Nane
SUBMIT IN TRIPLICATE -	- Other instructions on rev	verse side		7. If Unit or CA/Agreement, I Cane Creek Unit	
1. Type of Well    X	CC	NFIDENTI	AL	8. Well Name and No. Cane Creek Federal	#11-1
Hunt Petroleum (AEC), Inc.			· <u>·</u> ·	9. API Well No.	
3a. Address P.O. Box 1350. Houston TX 77251-13	• · · · · · · · · · · · · · · · · · · ·	hone No. ( <i>include area co</i> -871 <i>-</i> 3400	de)	43-019-31364 10. Field and Pool, or Explora	ntory Aran
4. Location of Well (Footage, Sec., T., R., M., or Survey Descrip 2220° FNL & 2060° FWL		0/2 9100		Wildcat	nory Area
SE NW Sec. 11, T26S, R19E				11. County or Parish, State	
				Grand County. UT	
12. CHECK APPROPRI	ATE BOX(ES) TO INDICAT	TE NATURE OF NOT	ICE, REPORT,	, OR OTHER DATA	
TYPE OF SUBMISSION		TYPE	OF ACTION		
X Notice of Intent	Acidize  Alter Casing	Deepen Fracture Treat	Production Reclamatic	(Start/Resume) Water S	
Subsequent Report	Casing Repair	New Construction	Recomplet	te X Other _	Flaring
Final Abandonment Notice	Convert to Injection	Plug and Abandon Plug Back	Temporari Water Dis	ly Abandon	
This well was completed and Since it was brought on lime shut-in). We feel the well gas flaring.	ne on 7/29/02, it ha	s produced very	erratical	ly (from 600 BOPD to	0
At this time we are request a more stabilized rate. Accepted by the Utah Division of Oil, Gas and Minin	<b>Q</b> Fede	ral Approval Of This		RECEIVE	D
Date: \$126/2002	AC	ion Is Necessary		AUG 1 6 2002	
#Flaring shall not exceed 30	days or somerce	10 1 0 10 10 11 10 10 10 10 10 10 10 10 10 10 10 10 1	29-02 HO	DIVISION OF OIL, GAS AND MINI	NG
14. I hereby certify that the foregoing is true and correct Name (Printed/Typed)  Victoria Guidry	ia Judy	Title <b>Regula</b>	tory Coord	Inator	
		Date 08/14/	/02		
THI	S SPACE FOR FEDERAL	L OR STATE OFF	ICE USE		
Approved by		Title		Date	
Conditions of approval, if any, are attached. Approval certify that the applicant holds legal or equitable title to which would entitle the applicant to conduct operations thereo	those rights in the subject lea				
	· · · · · · · · · · · · · · · · · · ·				

## **GEOLOGIC WELLSITE REPORT**

## **Aviara Energy Corporation**

Cane Creek Federal #11-1 2060' FWL, 2220' FNL, Sec 11, T 26 S, R 19E Grand County, Utah

Brian Reddick
Consulting Geologist
Hampton Waechter & Associates
1645 Court Place Suite 300
Denver Colorado, 80202

**RECEIVED** 

AUG 0 6 2002

DIVISION OF OIL, GAS AND MINING

#### **WELL SUMMARY**

The Cane Creek well was drilled primarily to test lower Cane Creek member (cycle 21) of the middle Pennsylvanian Paradox Formation. Potential secondary objectives may include the other clastic portions of cycles 1-20, with particular interest in cycles 3, 5, 13, and 15-20.

The Cane Creek well spudded on the 23<sup>rd</sup> of May 2002 with an air hammer and a 17 ½" bit. Surface casing (13 3/8") was set at 749' on the 24<sup>th</sup> of May. Early on the 26<sup>th</sup> of May surface casing was drilled out with an air hammer and a 12 ½" bit. The first formation top drilled was the Paradox, which was reached at 4260' on the 28<sup>th</sup> of May. At TD of 4300' for the 12 ½" hole, 9 5/8" casing was set to 4300'. Following casing drilling did not resume until the 1<sup>st</sup> of June, due to missing parts for testing the stack.

On the 5<sup>th</sup> of June, a brine flow from the 15<sup>th</sup> Clastic was encountered, as well as intermittent lost circulation. On the 9<sup>th</sup> of June the invert mud was replaced with water based brine mud. Drilling resumed with the new mud system on the 13<sup>th</sup> of June. Early on the 14<sup>th</sup> of June, KOP was reached and elogs were run.

On the 15<sup>th</sup> of June the well was kicked off at 7076'. On the morning of the 18<sup>th</sup> of June, casing point was reached at 7702'. Following casing, drilling resumed with the final build angle assembly on the 23<sup>rd</sup> of June. On the 26<sup>th</sup> of June, the build assembly was changed out for a steerable assembly at 7778' and an angle of 86°. Continued faulting kept the well bore below the hot shale. At 9130' a fracture system was encountered that took 25 bbl of fluid and then started flowing. The well was shut in and casing pressure was initially 800 psi, and decreased to 300 psi. At this point the MWD tools failed, and kill mud was pumped for the trip. On returning to drilling the casing pressure was 300 psi, and gas readings showed heavy gasses (C<sub>2</sub>, C<sub>3</sub>, C<sub>4</sub>, C<sub>5</sub>) through pentane. Additional fracture zones with fluid loss and gain were encountered at 9580' and 9770'.

A fault was encountered at 9484' and there was a difference of opinion over the displacement (Horizontal Solutions International thought a 38.7' fault dropped the well bore below the pay zone, and the well site geologist thought a 1.2' fault raised the well bore up further above the hot shale. At ~9550'-9700' the formation dip changed radically from 92.8° to 78.9°, and it was determined that the 38.7' fault interpretation was incorrect. Unfortunately due to the change in the dip angle and the large fault theory the well bore rose through the top of the cane creek and nearly into the salt. Once the well bore reaches the salt, it is no longer practical to drill ahead as the salt would flow into the well bore and plug it up after the well was completed. Due to time constraints the decision to sidetrack the well was ruled out, and TD was called at 9893'.

The three major fracture zones, indicated by gain/loss of fluid, torque, and samples should make the Cane Creek 11-1 well a fair to good producer.

#### **GEOLOGICAL SUMMARY**

The Triassic Chinle Formation consists predominately of interbedded sandstones, siltstones, with less common lacustrine limestones. This formation is fluvial to lacustrine in origin and not encountered in samples or on logs in the Cane Creek well.

The Cutler formation consists of sandstones and siltstones that grade from arkosic to quartzose in composition, and fluvial to eolian and beach depositional systems. This formation is Permian in age and is also not found in logs or samples in the Cane Creek well.

The Pennsylvanian Hermosa Formation was deposited in the same embayment as the Paradox Formation, but in an open marine environment. This formation consists of shallow marine and deltaic sandstone, siltstone, and increasing limestone with depth. The Hermosa Formation is not found on e-logs in the Cane Creek well, but the earliest samples above the paradox are from the Hermosa.

The Pennsylvanian Paradox formation was encountered at 4260' in samples, and at 4261' on e-logs. The Paradox formed in an intermittently restricted marine environment. This resulted in repeated cycles of clastics/carbonates/anhydrite-salt. The main pay in the Paradox is the lower Cane Creek (clastic cycle 21), which consists of organic rich dolomitic shales and siltstones. Caved samples (from the top of the MWD tool and blocking the choke line) were found to be quite hard, dark gray, and dolomitic while the samples that had been run through the bit were lighter and soft to firm. This change in the samples caused by drilling with a PDC bit made correlation more difficult.

#### **WELL DATA**

WELL NAME: Cane Creek Federal # 11-1

COMPANY REPRESENTATIVE: Gary Pridemore, John Carsrud, Bill Lorance, Ken

Cockerham

LOCATION: Surface hole location: 2220' FNL, 2060' FWL

Bottom hole location: 3766' FNL, 3989' FWL

Section 11, T26S, R19E Grand County, Utah

AFE NUMBER: 022012 D

FIELD: Cane Creek

ELEVATION: 6147' GL, 6172' KB

SPUD DATE: 5/23/02

DATE TD REACHED: 7/11/02

CONTRACTOR: Nabors # 686

TOOLPUSHER: Jim Zuida

DRILLERS: George Bryant, Darin Dickinson, James Puckett, Chris Dial,

Eric Hernandez

DRAWORKS: National 100 UE

PUMPS: #1 National 9-P-100, 9" stroke

#2 National 9-P-100, 9" stroke

HOLE SIZE: 17 ½" hole to 780'

12 1/4" hole to 780'-4300'

8 ¼" vertical hole 4300'-7076' 8 ¼" deviated hole 7076'-7702' 6" deviated hole 7702'-7778'

6" horizontal hole 7778'-9893' TD

13 3/8", 54.5#, K55 set at 749' 9 5/8", 40#, N-80 set at 4300'

7" 32# J-55set at 7702'

MUD COMPANY: MI

CASING:

ENGINEER: John Walsh, Jason Hurt, Steve Reed

PROGRAM: Mist to 4300', Invert mud to 4300'-6564', brine mud 6564'-

7702', invert mud 7702'-9893'TD

WELLSITE GEOLOGY: Hampton, Waechter & Associates

**GEOLOGIST:** 

Brian Reddick

**DIRECTIONAL & MWD:** 

Sperry Sun

**DIRECTIONAL DRILLERS:** 

Steve Kruger, Rudy Mershon, Tom Carleton, Larry Sledge,

Craig Davis

MWD HANDS:

Anthony Knight, Rod Thompson, Kevin Hoshall, Keith

McCoy

MUD LOGGING COMPANY:

Pason Systems USA

LOGGERS:

Kathy Blum, Hal Schmidt

LOGGING COMPANY:

Schlumberger

**ENGINEERS**:

Meg Sobkowicz

PROGRAMS:

Correlation run 7076'; Platform express

TOTAL DEPTH:

Correlation run 7076' Driller, 7080' Logger

**BOTTOM HOLE FORMATION:** 

Cane Creek

**SAMPLE PROGRAM:** 

grab samples 4200'-4300'

10' intervals 4300'-TD, caught by mudloggers

WELL STATUS:

open hole completion

## **DAILY CHRONOLOGY**

<u>Date</u>	Midnight depth	24 hr Footage	Activity
5/23/02	405'	326'	Nipple up, drill 79'-405'
5/24/02	780'	375'	Drill 405'-780', TOH, rig up casers, run casing, rig up cementers
5/25/02	780'	0'	Pump cement, TOH, wait on cement, nipple up, test BOP, TIH bit #2
5/26/02	1880'	1100'	Drill 780'-1880', work on rig
5/27/02	3821'	1941'	Drill 2246'-3821'
5/28/02	4300'	479'	Drill 3821'-4300', TOH, rig up casers, run casing, rig up cementers, pump cement
5/29/02	4300'	0'	Wait on cement, nipple up BOP
5/30/02	4300'	0'	Work on rig, rig up testers, wait on parts
5/31/02	4300'	0'	Wait on parts, work on rig, test BOP
6/1/02	4454'	154'	Work on pumps, drill 4300'-4310', test casing, drill 4310'-4388', work on pumps, drill 4388'-4454', work on pumps
6/2/02	4977'	523'	Work on pumps, drill 4454'-4977'
6/3/02	5735'	768'	Drill 4977'-5735'
6/4/02	6290'	555'	Drill 5735'-6290'
6/5/02	6564'	268'	Drill 6290'-6558', flowing salt water from 15 <sup>th</sup> Clastic, work on mud
6/6/02	6564'	0'	Work on mud, wait on parts
6/7/02	6564'	0'	Wait on parts, condition mud
6/8/02	6564'	0'	Work on mud, TOH to casing
6/9/02	6564'	0'	Work on mud, circ
6/10/02	6564'	0,	Work on mud, change out to water based brine
6/11/02	6564'	0,	Work on mud, change out to water based brine, TIH 6 stands, circ
6/12/02	6564	0'	Circ, TIH
6/13/02 6/14/02		512' 0'	Circ, TIH, drill 6564'-7076' Circ, TOH, rig up Schlumberge, run elogs,

make	un	<b>BHA</b>	for	build	TIH
manc	uν	מוע	IUI	ounu,	1111

			make up BITA for build, THI
6/15/02	7076'	0'	MWD failure, TOH, BHA left downhole, TIH
6/16/02	7110'	34'	Screw into BHA, TOH, xo motor, test BHA, TIH, drill 7076'-7078' work on pumps, drill 7078'-7110'
6/17/02	7515'	405'	Drill 7110'-7515'
6/18/02	7702'	187'	Drill 7515'-7702', circ and condition, short trip, TOH
6/19/02	7702'	0'	TOH, run casing, rig up cementers
6/20/02	7702'	0'	Pump cement, work on BOP
6/21/02	7702'	0'	Work on BOP, change out mud, test BOP
6/22/02	7702'	0'	BOP failed, wait on parts, work on BOP
6/23/02	7707'	5'	TIH, drill cement, drill out of casing shoe, drill 7702'-7707'
6/24/02	7730'	23'	Drill 7707'-7730', work on pumps
6/25/02	7777'	47'	Drill 7730'-7750', work on pumps, drill 7750'-7777'
6/26/02	7778'	1'	Drill 7777'-7778', pump slug, TOH, XO BHA, TIH, work on pumps
6/27/02	7882'	104'	Work on pumps, rill 7778'-7882'
6/28/02	7915'	33'	Drill 7882'-7910', TOH, TIH, drill 7910'-7915'
6/29/02	8085'	200'	Drill 7915'-8085'
6/30/02	8340'	255'	Drill 8085'-8340'
7/1/02	8491'	151'	Drill 8340'-8392', work on brakes, drill 8392'-8491'
7/2/02	8656'	165'	Drill 8491'-8656'
7/3/02	9065'		Drill 8656'-8967'
7/4/02	9199'	134'	Drill 9065'-9199', flow, attempt to drill through choke, MWD failure, mix pill
7/5/02	9199'	0'	Mix mud, TOH, XO MWD tools, TIH
7/6/02 7/7/02	9280' 9467'	81' 187'	TIH, drill 9199'-9280' Drill 9280'-9467'

7/8/02	9647'	180'	Drill 9467'-9647'
7/9/02	9777'	130'	Drill 9647'-9777', TOH MWD failure
7/10/02	9777'	0'	тон, тін
7/11/02	9893'	116'	Drill 9777'-9893' TD, circ and wait on orders

## **BIT RECORD**

#	MAKE	TYPE	SIZE	DEPTH	FOOTAGE	<b>HOURS</b>	<u>REMARKS</u>
				OUT		<u>RUN</u>	
1	STC	H42 R2R3PD	17 1/2"	780'	718'	12	Surface bit with air hammer
2	STC	H42 R2R3PD	12 1/4"	4300'	3520'	70.5	
3	STC	MA89	8 1/4"	7076'	2624'	91	PDC
4	STC	XR+	6"	7707'	5'	2.5	PDC
5	STC	XR10T	6"	7718'	71'	29.5	PDC
6	STC	MDT74	6"	7910'	132'	27.5	PDC
7	STC	MDT74	6"	9893'	1864'	18.5	PDC

## MUD RECORD

DATE	<b>DEPTH</b>	WT	<u>VIS</u>	<u>WL</u>	<u>Ck</u>	<u>C1</u>	SOL%
5/30/02	4300	10.2	45	4	1	26750	11.3
5/31/02	4300	10.2	45	4	1	26750	11.3
6/1/02	4400	10.5	50	3	2	27500	11.6
6/2/02	4896	10.5	50	3	2	27500	11.4
6/3/02	5512	11	50	4	2	34000	14.1
6/4/02	6189	11.3	55	4	2	46500	13.5
6/5/02	6494	13	53	4	2	56250	25
6/6/02	6629	14	72	3	2	72500	28
6/7/02	6629	13	88	4	2	39000	20.3
6/8/02	6488	11	50	4	2	34000	29.3
6/9/02	6488	12.9	70	4	2	32500	11.7
6/10/02	6564	16	132	8.8	2	140000	32
6/11/02	6564	16	70	15	2	162000	30
6/12/02	6564	16.1	59	18	2	190000	33.5
6/13/02	7066	15.5	77	7.6	3	155000	32
6/14/02	7076	15.6	78	3	3	155000	32
6/15/02	7076	15.5	77	3	3	155000	32
6/16/02	7122	15.5+	69	7	1	190000	32
6/17/02	7515	15.6	60	5	2	185000	32
6/18/02	7702	15.5	57	5	2	188000	32
6/19/02	7702	15.5	57	5	2	188000	32
6/20/02	7702	14.1	76		2	36500	25.4
6/21/02	7702	14.8	62			36000	26.9
6/22/02	7611	15.8	66			36500	26.4
6/23/02	7724	15.8	66			33000	31.4
6/24/02	7753	15.9	85			35000	32
6/25/02	7778	15.8	68			35000	30.6
6/26/02	7813	15.7	75			83000	33
6/27/02	7880	15.7	73			30000	30.8
6/28/02	7909	15.9	93			30000	32
6/29/02	8080	15.8	79			30000	32.8
6/30/02	8335	15.8	59			28000	32.9
6/31/02	8391	15.9	72			34000	35
7/1/02	8475	15.9	58			25000	34
7/2/02	8810	15.8	56			35000	33.5
7/3/02	9060	15.6	59			25000	33
7/4/02	9199	15.6	65			30000	32.3
7/4/02	9199	16.7	135			30000	38.7
7/6/02	9199	15.6	80			27000	33
	9457	15.3	77			32000	29.6
7/7/02	9640	15.5	65			33000	30.7
7/8/02	9777	15.2+	66	<del> </del>		29000	30.7
7/9/02 7/10/02	9777	15.2+	74			30000	30.7

## **DEVIATION SURVEYS**

Rig Surveys

<u>Number</u>	Measured Depth	<u>Inclination</u>	<u>Comments</u>
1	1730	3/4	
2	3683	2 1/2	

Sperry Sun Surveys, vertical hole and build

Measured Depth (ft)	Vertical Depth (ft)	Incl.	ı	Azim.	Vertical Section (ft)	Dogleg Rate (°/100ft)
4250	4249.29	•	1.75	16.97	-12.47	7 0
4365	4364.23	3	1.77	10.91	-13.97	7 0.16
4427	4426.2	2	2.06	8.75	-14.98	0.48
4521	4520.12	2	2.71	10.73	-16.88	3 0.7
4615	4614.03	3	2.34	20.19	-18.56	0.59
4709	4707.97	7	1.66	20.43	-19.6	0.72
4803	4801.95	5	0.68	11.53	-20.3	3 1.06
4897	4895.93	3	1.38	22.21	-20.88	0.77
4990	4988.9	l	0.96	21	-21.4	0.45
5084	5082.9	l	0.38	135.79	-21.38	3 1.25
5178	3 5176.9°	l	0.66	72.66	-20.77	7 0.63
5273	5271.9	9	8.0	113.92	-19.83	0.56
5367	5365.89	•	0.4	146.14	-18.88	3 0.54
5459	5457.89	•	0.32	174.13	-18.39	0.21
5553	3 5551.89	9	0.57	167.99	-17.84	0.27
5647	7 5645.88	3	0.76	151.62	-16.9	0.28
5741	5739.88	3	0.69	150.45	-15.8	0.08
5836	5834.87	7	0.66	146.78	-14.7	0.06
5932	2 5930.86	3	0.53	154.01	-13.82	2 0.16
6028	6026.86	3	0.42	181.36	-13.2	0.26
6121	6119.85	5	1.2	180.04	-12.38	0.84
6217	7 6215.84	1	0.64	239.78	-11.94	1.08
6311	6309.83	3	0.96	303.21	-12.9°	0.94
6404	6402.82	2	1.14	280.07	-14.	0.49
6497	6495.8	j	0.26	37.6		1 1.38
6591	6589.8	•	0.11	313.81	-15.4	0.29
6683	3 6681.8°	l	0.28	275.16	-15.68	3 0.22
6777	7 6775.8°		0.36	245.59	-16	0.19
6870	6868.8	3	0.65	231.17	-16.24	0.34
6964		3	0.74	217.89	-16.3	5 0.2
7026	7024.79	9	0.85	212.98	-16.29	0.21

Measured Depth (ft)	Vertical Depth (ft)	Incl.	Azim.	Section	Dogleg Rate (°/100ft)
705 708 712 715 718 721 724 727	7 7055.79 9 7087.77 0 7118.72 2 7150.56 3 7181.23 4 7211.6	7 2.24 2 4.59 6 6.88 3 9.65 6 13.4 4 15.22	179.99 157.51 146.48 141.87 137.64 134.88 139.3 138.32	-16.09 -15.36 -13.65 -10.56 -6.18 -0.03 7.54 16.25	1.79 4.23 7.84 7.29 9.14 12.22 6.84 8.66
730 733 736 740 743 746 749 752 755 758	8 7329.19 9 7356.89 0 7383.6 2 7410.29 3 7434.89 4 7458.39 5 7480.60 6 7501.60 7 7521.40 8 7539.	5 24.6 9 28.36 7 32.09 4 35.68 9 38.93 9 42.47 2 45.86 7 48.63 4 52.08 6 56.18	134.06 131.02 127.93 126.83 127.09 127 127.08 127.82 128.2	26.44 38.34 52.08 67.65 85.48 104.26 124.46 146.04 168.79 192.65 217.76 244.83	10.13 11.76 12.51 13 12.44 10.7 11.43 10.94 8.94 11.28 13.26 10.55
765 770				290.28	5.96

Sperry Sun Surveys, vertical hole and build

Measured Depth (ft)	Vertical Depth (ft)	Incl.	Azim.	Section	Dogleg Rate (°/100ft)
7709	7584.64	4 63.96	130	296.75	7.78
7741	7596.33	3 73.13	129.44	326.5	28.7
7772	7602.81	1 82.7	129.01	356.77	30.9
7804	7605.17	7 88.86	129.01	388.67	19.25
7836	7605.07	7 91.48	129.53	420.67	8.35
7868	7604.13	3 91.91	127.85	452.65	5.42
7900	7603.99	88.58	126.98	484.64	10.76
7931	7605.13	3 87.19	128.03	515.6	5.62
7963	7606.69	9 87.25	129.47	547.56	4.5
7995	7608.3	3 86.95	129.82	579.52	1.44
8026	7609.89	9 87.19	130.12	610.48	1.24
8058	3 7611.2°	1 88.09	130.19	642.44	2.82
8090	7612.3	3 87.9	129.84	674.42	1.24
8121	7613.24	4 88.74	129.96	705.4	2.74
8153	3 7613.59	9 90	131.28	737.38	5.7
818	7614.1	5 87.99	131.52	769.35	6.33

Measured Depth (ft)	Vertical Depth (ft)	Incl.	Azim.	Vertical Section (ft)	Dogleg Rate (°/100ft)
` '	, ,			• •	
8216	7615.22	2 88.0	5 131.6	800.3	0.32
8248	3 7615.64	4 90.4	3 131.41	832.26	7.46
8279	7614.9°	1 92.2	8 131.15	863.23	6.03
831 <sup>-</sup>	1 7612.9	5 94.7	5 131.63	895.14	7.86
8342	2 7609.68	97.3	6 131.52	925.93	8.43
8374	4 7605.84	4 96.4	3 131.98	957.66	3.24
8406	7603.29	9 92.7	2 132.71	989.5	11.81
843	7 7601.8	5 92.5	9 133.12	1020.4	1.39
8469	7600.29	92.9	9 133.26	1052.27	1.32
8500	7598.8	92.2	2 133.69	1083.15	2.84
8532	2 7597.66	92.1	6 133.87	1115.01	0.59
8564	4 7596.2	2 93.0			2.9
859	5 7594.67	7 92.	6 133.93	1177.7	1.57
862	7 7593.32	2 92.2	5 134.51	1209.54	
8659	7591.4	5 94.4	5 134.77	1241.33	6.92
8690		4 94.4			
872	2 7587.02			1303.89	5.13
875			1 133.98	1334.73	1.46
878	5 7583.6°	1 93.1	5 133.78	1366.56	0.65
881	7 758:	2 92.6	2 133.06	1398.43	2.79
884	3 7580.69	9 92.2	5 133.17	1429.32	1.25
888	7579.80	6 90.7	1 132.99	1461.23	
8912					1.31
894	3 7579.10				
897					
900					
903					13.49
9070					2.44
910	2 7575.20	6 92.9	3 128.97	1682.89	7.57
913					
916					
919					
922					
926					
929					
932					
935					· -
938					
941					
945					
948					
951					
954					
9570					
960					
964	7543.5	1 87.2	5 125.43	2219.61	8.7

Measured Depth (ft)	Vertical Depth (ft)	Incl.	Azim.	Vertical Section (ft)	Dogleg Rate (°/100ft)
9671	7545.21	1 86.45	5 125.1	1 2250.	5 2.78
9703	7547.34	4 85.92	126.0	2282.3	7 3.29
9735	7549.25	5 87.22	126.1	1 2314.2	7 4.07
9765	7550.68	87.35	125.3	9 2344.1	9 2.44
9797	7551.83	3 88.52	2 125.3	31 2376.	1 3.66
9829	7552.54	4 88.95	125.1	11 2408.0	3 1.48
9847	7552.91	1 88.67	7 124.9	9 2425.9	8 1.69
9893	7553.98	88.67	7 124.9	9 2471.8	5 0

## **FORMATION TOPS**

## Measured from a KB elevation of 6172'

<u>FORMATION</u>	Sample Top MD	E-log top
Paradox	4260'	4261'
2 <sup>nd</sup> Salt	4260'	4261'
2 <sup>nd</sup> Clastic	4404'	4406'
3 <sup>rd</sup> Salt	4466'	4468'
3 <sup>rd</sup> Clastic	4626'	4624'
4th Salt	4689'	4694'
4 <sup>th</sup> Clastic	4745'	4749'
5 <sup>th</sup> Salt	4785'	4788'
5 <sup>th</sup> Clastic	4948'	4953'
6 <sup>th</sup> Salt	5040'	5046'
6 <sup>th</sup> Clastic	5355'	5346'
7 <sup>th</sup> Salt	5370'	5373'
7 <sup>th</sup> Clastic	5476'	5476'
8 <sup>th</sup> Salt	5483'	5484'
8 <sup>th</sup> Clastic	5560'	5564'
9 <sup>th</sup> Salt	5611'	5612'
9 <sup>th</sup> Clastic	5730'	5726'
10 <sup>th</sup> Salt	5768'	5772'
10 <sup>th</sup> Clastic	5918'	5918'
11 <sup>th</sup> Salt	5956'	5956'
11 <sup>th</sup> Clastic	6001'	6002'
13 <sup>th</sup> Salt	6091'	6090'
13 <sup>th</sup> Clastic	6207'	6210'
14 <sup>th</sup> Salt	6227'	6228'
14 <sup>th</sup> Clastic	6311'	6308'
15 <sup>th</sup> Salt	6322'	6326'
15 <sup>th</sup> Clastic	6366'	6368'
16 <sup>th</sup> Salt	6388'	6392'
16 <sup>th</sup> Clastic	6542'	6548'
17 <sup>th</sup> Salt	6558'	6564'
17 <sup>th</sup> Clastic	6602'	6608'
18 <sup>th</sup> Salt	6610'	6614'
18 <sup>th</sup> Clastic	6811'	6814'
	FORMATION TOPS	

#### Measured from a KB elevation of 6172'

<u>FORMATION</u>	Sample Top MD	E-log top
19 <sup>th</sup> Salt 19 <sup>th</sup> Clastic	6819' 7070'	6825'
20 <sup>th</sup> Salt 20 <sup>th</sup> Clastic	7112' 7233'	
21 <sup>st</sup> Salt Cane Creek	7262' 7587'	
TD	9893'	

#### SAMPLE DESCRIPTIONS

#### **SAMPLE DESCRIPTIONS VERTICAL & BUILD**

- 4225-4250 Shale dark gray to black, blocky to platy, calcareous, smooth to silty, occasional grading to siltstone, trace light gray brown very fine grained sandstone, fair trace gray limestone
- 4250-4260 Shale dark gray to black, blocky to platy, smooth, trace interbed siltstone, good trace off white anhydrite
- 4260-4300 Halite off white to translucent, sub blocky to platy, firm, clean, brittle, crystalline
- 4300-4350 Halite off white to translucent, occasional transparent, sub blocky to blocky, firm, clean, brittle, crystalline to coarse crystalline
- 4350-4410 Halite off white to translucent, blocky to platy, firm, clean, crystalline
- 4410-4420 Shale light gray to black, sub blocky, occasional platy, soft, abundant off white anhydrite, carbonaceous in part
- 4420-4440 Shale light gray to black, sub blocky to blocky, occasional platy, soft, abundant off white to white anhydrite, carbonaceous in part
- 4440-4460 Shale light to medium gray, sub blocky, earthy to slightly silty, good trace anhydrite, anhydritic in part
- 4460-4466 Shale cont a/a, slightly carbonaceous in part
- 4466-4500 Halite off white to translucent, sub blocky to blocky, firm, brittle, crystalline, clean, trace interbed shale
- 4500-4550 Halite off white to translucent, blocky, firm, brittle, clean, trace anhydrite
- 4550-4600 Halite off white to translucent, blocky to platy, firm, brittle, crystalline, clean, trace interbed shale and anhydrite
- 4600-4626 Halite cont a/a, trace interbed shale, trace anhydrite
- 4626-4654 Shale gray, sub blocky, occasional platy, soft, anhydritic in part, smooth to slightly silty
- 4654-4660 Anhydrite off white to white, sub blocky, soft, amorphous, slightly calcareous
- 4660-4680 Shale light gray to black, platy to sub blocky, soft, carbonaceous in part, anhydritic in part, good trace anhydrite a/a
- 4680-4695 Shale light gray to black, sub blocky, soft, carbonaceous in part, anhydritic in part, trace anhydrite
- 4695-4745 Halite off white to translucent, sub blocky to blocky, clean, brittle, crystalline
- 4745-4760 Anhydrite off white to light gray, sub blocky, soft, smooth, argillaceous in part, grading to anhydrite shale in part, amorphous
- 4760-4772 Shale light to dark gray, sub blocky, soft to firm, smooth to earthy, carbonaceous in part, anhydritic in part, good trace anhydrite

4772-4785 Shale light to dark gray, sub blocky to platy, soft, smooth to earthy, occasional slightly silty, carbonaceous in part, anhydritic in part

4785-4800 Halite off white to translucent, occasional white, sub blocky to blocky, firm, crystalline, occasional anhydrite

4800-4850 Halite off white to white, sub blocky to blocky, firm, crystalline, clean, trace anhydrite

4850-4900 Halite off white to translucent, blocky to platy, firm, crystalline, clean, brittle

4900-4948 Halite cont a/a

4948-4952 Anhydrite white to light gray, sub blocky, soft, amorphous, chalky in part, clean

4952-4980 Shale light gray, occasional m to dark gray, sub blocky to platy, soft, smooth to earthy, anhydritic in part, occasional carbonaceous

4980-5000 Shale gray to dark gray to black, sub blocky, soft, smooth to earthy, carbonaceous in part, good trace anhydrite

5000-5020 Shale gray to dark gray, sub blocky to platy, soft, smooth to slightly silty, carbonaceous in part, anhydritic in part

5020-5040 Shale a/a, interbed with white to off white anhydrite, soft, sub blocky, amorphous

5040-5070 Halite off white, sub blocky to blocky, firm, clean, crystalline, trace anhydrite

5070-5100 Halite off white to translucent, blocky to platy, firm, crystalline, clean, brittle

5100-5150 Halite cont a/a

5150-5200 Halite off white to translucent, blocky to platy, firm, crystalline, clean, brittle, trace anhydrite

5200-5250 Halite cont a/a

5250-5300 Halite off white to translucent, blocky, occasional platy, firm, clean, brittle, crystalline

5300-5350 Halite off white to translucent, blocky to platy, brittle, clean, crystalline, firm, trace anhydrite

5355-5360 Shale light to medium gray, occasional dark gray, sub blocky, soft, smooth to earthy, carbonaceous in part, good trace anhydrite

5360-5370 Shale gray, sub blocky to platy, soft, smooth, carbonaceous in part, abundant off white to white anhydrite

5350-5400 Halite off white to translucent, blocky to platy, firm, clean, crystalline, brittle

5400-5476 Halite cont a/a

5476-5483 Shale light to medium gray, sub blocky to platy, soft, smooth to earthy, good trace anhydrite

5483-5530 Halite off white to translucent, blocky, firm, brittle, clean, crystalline

5530-5560 Halite off white to translucent, blocky to platy, firm, brittle, clean, crystalline, trace anhydrite

5560-5580 Shale light to medium gray, sub blocky to platy, very soft, carbonaceous in part, abundant white anhydrite

5580-5590 Shale light to medium gray, sub blocky, soft, anhydritic in part, good trace anhydrite

5590-5600 Anhydrite off white to white, soft, sub blocky, amorphous, occasional light gray, clean to slightly argillaceous

5600-5611 Shale light gray to medium gray, sub blocky, soft, smooth to earthy, anhydritic in part, good trace white anhydrite

5611-5650 Halite off white to translucent, blocky to sub blocky, firm, clean, brittle, good trace white anhydrite

5650-5700 Halite off white to translucent, blocky to platy, firm, brittle

5700-5730 Halite cont a/a

5730-5740 Anhydrite off white to white, sub blocky, soft, chalky in part, amorphous

5740-5750 Shale light to medium gray, occasional dark gray, sub blocky to platy, carbonaceous in part, good trace anhydrite

5750-5768 Shale light to dark gray, sub blocky to platy, soft, smooth to earthy, carbonaceous in part, good trace white anhydrite

5768-5800 Halite off white to translucent, blocky to platy, firm, brittle, clean, trace anhydrite

5800-5850 Halite cont a/a

5850-5920 Halite off white to translucent, blocky to platy, clean, brittle, firm, crystalline, trace anhydrite

5920-5930 Anhydrite white, sub blocky to blocky, soft, clean to slightly argillaceous, amorphous

5930-5956 Shale light to medium gray, sub blocky to platy, soft, anhydrite, grading to argillaceous anhydritic in part

5956-6001 Halite off white to translucent, blocky, crystalline, brittle, firm

6001-6010 Shale light to medium gray, sub blocky to platy, soft, smooth, anhydritic in part, trace anhydrite

6010-6020 Anhydrite off white to white, sub blocky, soft, clean, amorphous

6020-6044 Shale gray to black, sub blocky to platy, soft, smooth to earthy, carbonaceous in part, anhydritic in part, good trace off white anhydrite

6044-6048 Halite cont a/a

6048-6070 Shale light to medium gray, sub blocky, soft, smooth to earthy, occasional slightly silty, occasional carbonaceous, good trace anhydrite

6070-6090 Shale cont a/a, inc carbonaceous

6090-6102 Halite off white to translucent, blocky to platy, firm, brittle, clean, crystalline

6102-6106 Shale black to dark gray, sub blocky to platy, soft, smooth, carbonaceous

6106-6150 Halite off white, blocky to platy, firm, clean, brittle, crystalline

6150-6208 Halite off white to translucent, sub blocky to platy, firm, clean, brittle, crystalline, trace anhydrite, trace gray shale

6208-6228 Shale black to dark gray, sub blocky to platy, soft, very carbonaceous, grading to argillaceous shale in part

6228-6250 Halite off white to translucent, blocky to platy, firm, clean, brittle, crystalline, trace anhydrite

6250-6312 Halite off white to translucent, blocky to platy, firm, brittle, crystalline, clean, poor trace gray shale a/a, good trace anhydrite

6312-6322 Shale light to dark gray, sub blocky to platy, soft, smooth to earthy, carbonaceous in part, good trace white anhydrite

6322-6366 Halite off white to translucent, blocky to platy, crystalline, clean, brittle

6366-6380 Shale light gray, occasional black, sub blocky to platy, soft, smooth to slightly silty, good trace white anhydrite, poor sample predominant salt

6380-6388 Shale light gray, sub blocky to platy, soft, smooth to earthy, good trace white anhydrite

6388-6450 Halite off white to translucent, blocky to platy, firm, brittle, crystalline

6450-6500 Halite off white to translucent, blocky to platy, firm, brittle, clean, trace anhydrite

6500-6546 Halite cont a/a

6546-6560 Shale gray, sub blocky, soft, smooth, very poor sample, predominant mush

6560-6602 Halite off white to translucent to cream, sub blocky, firm, brittle, very finely crystalline, trace gray shale a/a

6602-6610 Shale gray to black, sub blocky, soft to very soft, carbonaceous in part, good trace white anhydrite

6610-6650 Halite off white to translucent, sub blocky, firm, brittle, clean, trace anhydrite

6650-6700 Halite off white to translucent, sub blocky to blocky, firm, brittle, clean, crystalline, trace gray shale a/a

6700-6750 Halite off white to translucent, sub blocky, firm, brittle, clean, crystalline

6750-6812 Halite white to translucent, sub blocky, firm, brittle, clean, crystalline

6812-6819 Shale gray, sub blocky, soft, earthy to silty, carbonaceous in part, trace anhydrite

6819-6855 Halite off white to white to translucent, sub blocky to platy, firm, brittle, crystalline, clean

6855-6876 Halite cont a/a, trace orange mineral, carnalite?

6876-6900 Halite white to translucent, blocky to platy, firm, brittle, crystalline, clean, trace gray shale

6900-6950 Halite off white to white to translucent, blocky to platy, firm, brittle, clean, crystalline, trace anhydrite, trace gray shale

6950-7000 Halite white, blocky to platy, firm, brittle, clean, crystalline, trace gray shale

7000-7050 Halite white to translucent, blocky to platy, firm, brittle, crystalline, trace anhydrite

7050-7060 Anhydrite white to off white, blocky to sub blocky, soft, occasional firm, predominant amorphous, occasional very fine crystalline

7060-7070 Shale light gray, sub blocky, very soft, anhydritic in part, good trace interbed anhydrite, slightly silty

7070-7080 Anhydrite white to off white, blocky to sub blocky, soft to very soft, amorphous, chalky

7080-7090 Anhydrite and light gray shale cont a/a

7090-7112 Shale light gray, sub blocky, very soft, anhydrite, slightly silty, predominant mush

7112-7150 Halite off white to white, occasional translucent, sub blocky to blocky, firm, brittle, crystalline, clean

7150-7200 Halite off white to white, sub blocky to platy, firm, clean, brittle, crystalline

7200-7233 Halite cont a/a

7233-7250 Shale gray to black, sub blocky, soft smooth to earthy, carbonaceous in part

7250-7257 Shale gray, sub blocky, soft to very soft, smooth to slightly silty, anhydrite, good trace interbed anhydrite

7257-7300 Halite white, blocky to sub blocky, firm, brittle, clean, crystalline, trace anhydrite, occasional orange mineral

7300-7350 Halite off white to white, blocky to platy, firm, brittle, clean, crystalline

7350-7400 Halite cont a/a

7400-7450 Halite white to translucent, blocky to sub blocky, firm, brittle, crystalline, clean trace anhydrite, occasional gray shale

7450-7500 Halite off white to white to translucent, blocky to sub blocky, firm, brittle, crystalline, clean, trace gray shale

7500-7550 Halite white, blocky to sub blocky, firm, brittle, clean, crystalline, trace anhydrite

7550-7600 Halite off white to white to translucent, blocky to platy, firm, brittle, clean, crystalline, trace gray shale

7600-7650 Halite cont a/a

7650-7681 Halite white to translucent, sub blocky to platy, firm, brittle, clean, trace gray shale, trace anhydrite

7681-7686 Shale dark gray to black, sub blocky, soft to firm, good trace carbonaceous dust, carbonaceous, trace anhydrite

7686-7698 Anhydrite white, sub blocky, soft, amorphous, good trace interbed carbonaceous shale a/a

#### SAMPLE DESCRIPTIONS HORIZONTAL

7681-7686 Shale dark gray to black, sub blocky, soft to firm, good trace carbonaceous dust, carbonaceous, trace anhydrite

7686-7720 Anhydrite off white to white, sub blocky, soft, amorphous, predominant clean

7720-7740 Shale medium to dark gray, sub blocky to platy, firm, earthy to slightly silty, grading to siltstone in part

7650-7681 Halite white to translucent, sub blocky to platy, firm, brittle, clean, trace gray shale, trace anhydrite

7686-7698 Anhydrite white, sub blocky, soft, amorphous, good trace interbed carbonaceous shale a/a

7698-7720 Shale dark gray, sub blocky, occasional platy, firm, smooth to earthy, carbonaceous in part, abundant white anhydrite

7760-7815 Shale dark gray, sub blocky to platy, firm, earthy to silty, carbonaceous in part, good trace interbed siltstone

7740-7760 Anhydrite white, sub blocky, soft, amorphous, clean

7815-7846 Shale dark gray to black, sub blocky to platy, firm, earthy to silty, carbonaceous, trace interbed siltstone

#### Formation dip angle at 128° AZM 7786' to 7888' = 89.8°

7846-7860 Shale black, splintery to platy, firm, smooth to earthy, carbonaceous to very carbonaceous, grading to argillaceous coal in part

7860-7890 Shale dark gray to black, sub blocky to platy, firm, earthy to slightly silty, carbonaceous in part, trace gray siltstone, trace anhydrite

7890-7930 Shale dark gray to black, sub blocky to platy, firm, earthy to slightly silty, carbonaceous in part, occasional grading to argillaceous siltstone, trace anhydrite

#### Formation dip angle at 130° AZM 7920' to 8012' = 88.1°

7930-7940 Shale light to dark gray, sub blocky, firm to slightly soft, earthy, anhydritic in part, carbonaceous in part

7940-7970 Shale light to m gray, sub blocky, firm to slightly soft, earthy, anhydritic in part, slightly carbonaceous in part

7970-8000 Shale light to m gray, sub blocky to platy, firm, earthy to silty, anhydritic in part

8000-8030 Shale light to medium gray, sub blocky to platy, firm, earthy to slightly silty, anhydritic in part, occasional grading to light gray siltstone

8030-8050 Shale light to medium gray, sub blocky to platy, firm to soft, earthy to silty, fair trace black soft carbonaceous shale

8050-8080 Shale light to medium gray, sub blocky to platy, firm, earthy to silty, occasional grading to siltstone, anhydritic in part

8080-8110 Shale light to medium gray, sub blocky to platy, firm, silty to earthy, anhydritic in part, trace anhydrite

#### Formation dip angle at 130° AZM 8012' to 8150' =91.3°

8110-8136 Shale light to medium gray, sub blocky to platy, firm, silty to earthy, grading to light gray shale siltstone in part, anhydritic in part

8136-8160 Shale light to medium gray, occasional dark gray to dark brown, sub blocky to platy, firm to soft, earthy to silty, occasional smooth, carbonaceous in part

8160-8200 Shale light to medium gray to dark gray, occasional dark brown, sub blocky to platy, firm, earthy to silty, carbonaceous in part

8200-8230 Shale light to medium gray, sub blocky to platy, firm to soft, earthy to silty, anhydritic in part, carbonaceous in part, trace white anhydrite

8230-8260 Shale light to medium gray, sub blocky to platy, firm to soft, earthy to silty, anhydritic in part, grading to siltstone in part, fair trace white anhydrite

#### Formation dip angle at 130° AZM 8150' to 8296' = 89.8°

8260-8290 Shale light to medium gray, sub blocky to platy, firm, earthy to silty, anhydritic in part, carbonaceous in part, fair trace white anhydrite

8290-8320 Shale light to medium gray, sub blocky to platy, firm to soft, earthy to silty, anhydritic in part, carbonaceous in part, trace white anhydrite

8320-8340 Shale light to medium gray, occasional dark gray, sub blocky to platy, firm, earthy to silty, carbonaceous in part, trace anhydrite

#### Formation dip angle at 131° AZM 8298' to 8346' = 91.7°

8340-8370 Shale light to medium gray, sub blocky to platy, firm, earthy to silty, carbonaceous in part, occasional anhydrite, grading to siltstone in part

8370-8390 Shale light to medium gray, sub blocky to platy, firm, earthy to silty, occasional grading to siltstone, occasional carbonaceous, trace anhydrite

8390-8420 Shale light to medium gray, sub blocky to platy, firm, earthy to silty, grading to siltstone in part, trace carbonaceous

8420-8450 Shale light to medium gray, sub blocky to platy, firm, earthy to silty, trace siltstone, occasional carbonaceous in part

8450-8480 Shale light to medium gray, sub blocky to platy, firm to slightly soft, earthy to slightly silty, trace carbonaceous shale

#### Formation dip angle at 134° AZM 8346' to 8456' =92°

8480-8500 Shale m to light gray, firm, sub blocky to platy, earthy, inc carbonaceous, cont trace anhydrite

8500-8530 Shale light to medium gray, sub blocky to platy, firm, earthy to silty, grading to argillaceous siltstone in part

8530-8550 Shale light to medium gray, sub blocky to platy, firm, earthy to silty, occasional slightly carbonaceous, trace light gray siltstone

8550-8570 Shale medium to dark gray, sub blocky to platy, firm, earthy, occasional silty, carbonaceous in part, trace siltstone

#### Formation dip angle at 134° AZM 8056' to 8583' = 91.7°

8570-8600 Shale light to medium gray, sub blocky to platy, firm, earthy to silty, grading to light gray siltstone in part, trace carbonaceous shale, trace anhydrite

8600-8630 Shale medium to dark gray, occasional light gray to dark brown, sub blocky to platy, firm, earthy, occasional silty, carbonaceous in part, poor streaming crush cut

8630-8660 Shale m to light to dark gray, occasional brown, sub blocky to platy, firm, earthy to slightly silty, carbonaceous in part,

#### Formation dip angle at 134° AZM 8614' to 8696' = 92.3°

8660-8710 Shale light to medium gray, sub blocky to platy, firm, earthy to silty, trace carbonaceous shale, trace gray siltstone

8710-8730 Shale light to medium gray, sub blocky to platy, firm, earthy to slightly silty, occasional grading to light gray siltstone

8700-8730 Shale light to medium gray, sub blocky to platy, firm, earthy to silty, trace carbonaceous shale, good trace gray siltstone

8730-8760 Shale light to medium gray, sub blocky to platy, firm, earthy to slightly silty, occasional grading to siltstone

#### Formation dip angle at 134° AZM 8696' to 8848' = 92.9°

8760-8790 Shale m to light gray, sub blocky to platy, firm, earthy to slightly silty, grading to siltstone in part, occasional carbonaceous shale

8790-8820 Shale m to light gray, sub blocky to platy, firm, earthy to silty, carbonaceous in part, trace siltstone

8820-8850 Shale light to medium gray, sub blocky to platy, firm, silty, grading to siltstone in part

#### Formation dip angle at 133° AZM 8848' to 8885' = 91.4°

8850-8880 Shale light to medium gray, sub blocky to platy, firm, earthy to silty, grading to siltstone in part, trace carbonaceous shale

8880-8910 Shale m to light gray, sub blocky to platy, firm, earthy to silty, trace carbonaceous shale, good trace light gray siltstone

#### Formation dip angle at 133° AZM 8808' to 8928' = 89.6°

8910-8940 Shale m to light gray, sub blocky to platy, firm, earthy to silty, grading to siltstone in part, trace carbonaceous shale, rare anhydrite

8940-8970 Shale m to light gray, sub blocky to platy, firm, earthy to slightly silty, trace siltstone, trace anhydrite

8970-9000 Shale dark gray to black to dark brown, sub blocky to platy, firm, earthy to smooth, carbonaceous, occasional very carbonaceous

9000-9030 Shale dark gray to black, sub blocky to platy, firm, earthy, carbonaceous, good trace anhydrite

#### Formation dip angle at 133° AZM 8978' to 9053' = 91°

9030-9050 Shale dark gray to black to medium gray, sub blocky to platy, firm, earthy to smooth to silty, carbonaceous in part, trace anhydrite

9050-9080 Shale light to medium gray, sub blocky to platy, firm, earthy to silty, trace carbonaceous shale, trace anhydrite

9080-9110 Shale light to medium gray, sub blocky to platy, firm, earthy to silty, grading to siltstone in part, fair trace anhydrite

9130-9140 Lost 25 bbl, flowed 25 to 30 bbl, shut in 800 to 500 PSI

9110-9140 Shale light to medium gray, sub blocky to platy, firm, earthy to silty, trace carbonaceous shale, trace anhydrite

9140-9170 Shale light to medium gray, sub blocky to platy, firm, earthy to silty, trace anhydrite, grading to siltstone in part

9170-9200 Shale m to light gray, sub blocky to platy, firm, earthy, occasional grading to siltstone

9200-9230 Shale m to light gray, sub blocky to platy, firm, earthy to silty, occasional grading to siltstone

#### Formation dip angle at 130° AZM 9053' to 9283' = 91.8°

9230-9260 Shale light to medium gray, sub blocky to platy, firm, earthy to silty, trace black carbonaceous shale, grading to siltstone in part

9260-9280 Shale medium to dark gray, sub blocky to platy, firm, earthy to silty, carbonaceous in part, good trace anhydrite

9280-9310 Shale light to medium gray, sub blocky to platy, firm, earthy to silty, trace anhydrite, trace black carbonaceous shale, grading to siltstone in part

9310-9340 Shale m to light gray, sub blocky to platy, firm, silty to earthy, grading to siltstone in part

9340-9360 Shale light to medium gray, occasional dark gray, sub blocky to platy, firm, earthy to silty, carbonaceous in part, occasional grading to siltstone

9360-9390 Shale medium to dark gray, sub blocky to platy, firm, earthy to smooth, carbonaceous in part, cont trace light gray silty shale

9390-9410 Shale light to medium gray, sub blocky to platy, firm, silty to earthy, grading to siltstone in part

9410-9440 Shale light gray, sub blocky to platy, firm, earthy to silty, grading to siltstone

#### Formation dip angle at 130° AZM 9381' to 9455' = 91.5°

9440-9470 Shale medium to dark gray, occasional black sub blocky to platy, firm, earthy to smooth, carbonaceous, occasional very carbonaceous

9470-9500 Shale m to light gray, sub blocky to platy, firm, earthy, carbonaceous in part, trace anhydrite

#### Formation dip angle at 128° AZM 9455' to 9534= 92.1°

9500-9530 Shale medium to dark gray, sub blocky to platy, firm, earthy, carbonaceous, trace anhydrite

9530-9570 Shale medium to dark gray, sub blocky to platy, firm, earthy to slightly silty, carbonaceous, trace anhydrite

9574-9580 Formation took 100 bbl fluid, some torque

#### Formation dip angle at 128° AZM 9494' to 9598' = 92.6°

9570-9600 Shale medium to dark gray, sub blocky to platy, firm, earthy to slightly silty, carbonaceous, trace anhydrite, trace crystalline anhydrite fracture fill

9600-9630 Shale medium to dark gray, sub blocky to platy, firm, earthy to silty, occasional light gray siltstone

9630-9660 Shale light to medium to dark gray, sub blocky to platy, firm, earthy to silty, carbonaceous in part, grading to siltstone in part

#### Formation dip angle at 125° AZM 9598' to 9650' = 88.5°

9660-9690 Shale m gray, sub blocky to platy, firm, earthy to slightly silty, carbonaceous in part, trace anhydrite

9690-9730 Shale m to light gray, sub blocky to platy, firm, earthy to slightly silty, carbonaceous in part, slightly increased anhydrite

9730-9750 Shale dark gray to black, platy to sub blocky, earthy to smooth, carbonaceous to very carbonaceous, good trace off white to translucent anhydrite

#### Formation dip angle at 125° AZM 9688' to 9757' =81.6°

9750-9780 Shale dark gray to black, sub blocky to platy, firm, earthy to slightly silty, abundant white anhydrite

9780-9810 Anhydrite white, sub blocky, soft, amorphous, chalky

9770-9810 Formation took 60 bbl fluid

9810-9840 Shale medium to dark gray, sub blocky to platy, firm, earthy, carbonaceous in part, abundant anhydrite

9840-9855 Shale medium to dark gray, sub blocky to platy, firm, earthy, carbonaceous, abundant anhydrite, abundant salt, possible fracture fill

#### Formation dip angle at 125° AZM 9688' to 9757' =79.8°

9855-9893 Anhydrite white to tan, sub blocky to platy, soft, amorphous, clean to m argillaceous

Form 3160-5 (November 1994)

# DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

FORM APPROVED
Budget Bureau No. 1004-0135
Expires July 31, 1996

5. Lease Serial No.

Ш	u	_4	c	E	o.	7	2
UI	u	-1	9	J	7	,	۷

6. If Indian, Allottee or Tribe Name

abandoned well. Use Form	n 3160-3 (APD) for	such proposals.		
SUBMIT IN TRIPLICATE -	C	f Unit or CA/Agreement, Name and/or No. ane Creek Unit Agreement		
1. Type of Well    X Oil Gas Well Other  2. Name of Operator		NHIUENTIAL	8. V	TU80000X  Well Name and No. e Creek Federal #11-1
Hunt Petroleum (AEC), Inc.			9. 6	API Well No.
3a. Address		3b. Phone No. (include area		-019-31364-00
P.O. Box 1350. Houston TX 77251-13  4. Location of Well (Footage, Sec., T., R., M., or Survey Descrip		713-871-3400		Field and Pool, or Exploratory Area
2220' FNL & 2060' FWL				
SE NW Sec. 11, T26S, R19E	l l	County or Parish, State		
		and County. UT		
12. CHECK APPROPRIA	ATE BOX(ES) TO IN	DICATE NATURE OF NO	OTICE, REPORT, OR O	THER DATA
TYPE OF SUBMISSION		TY	PE OF ACTION	
X Notice of Intent	Acidize	Deepen	Production (Start/	Resume) Water Shut-Off
[X]	Alter Casing	Fracture Treat	Reclamation	Well Integrity
Subsequent Report	Casing Repair	New Construction	Recomplete	X Other
D 5: 4 No. 4 mars No.	Change Plans	Plug and Abandon	Temporarily Abar	Re-run Tubing
Final Abandonment Notice	Convert to Injection	n Plug Back	Water Disposal	
Request approval to pull co as per the following propos  1. MIRU pulling unit. Che 2. ND tree, NU BOP. 3. Shear packer w/ 120,000 4. TIH w/ redressed packer	ed procedures: ck to insure we # pull and TOH v	<pre>il is still dead. w/ tubing, packer,</pre>	, and tail pipe.	
5. ND BOP and NU tree.		•		
6. Swab test well. 7. <b>ARDUG pteditby the</b> and e	valuate to nut v	ell on numo.		RECEIVED
Utah Division of	valuace to put i	err on pump.		SEP 0 3 2002
Oil, Gas and Mining	Fode	eral Approval Of This	COPY SENT TO OPE	ROTA
Date: 9/3/2002		tion Is Necessary	9-3-0 CHN	DIAISION OF
By: Dolla Dent				OIL, GAS AND MINING
14. I hereby certify that the foregoing is true and correct Name (Printed/Typed)	$\mathcal{A}$	Title		
Victoria Guidry ///	a Hudr	Regul	atory Coordinate	or
		Date 08/30	0/02	
THIS	SPACE FOR FEDE	RAL OR STATE OF	FICE USE	
Approved by		Title		Date
Conditions of approval, if any, are attached. Approval of certify that the applicant holds legal or equitable title to which would entitle the applicant to conduct operations thereon.	this notice does not wa those rights in the subje	rrant or Office ct lease		
Title 18 U.S.C. Section 1001, makes it a crime for any fraudulent statements or representations as to any matter within	person knowingly and vits jurisdiction.	villfully to make to any de	partment or agency of th	ne United States any false, fictitious or

## HUNT PETROLEUM (AEC), INC.

P.O. Box 1350, Houston, Texas 77251-1350 One Riverway, Suite 700 Houston, Texas 77056 Telephone (713) 871-3400

CONFIDENTIAL

August 30, 2002

Mr. Eric Jones
Bureau of Land Management
82 E. Dogwood
Moab, UT 84532

Ms. Carol Daniels
Division of Oil, Gas, & Mining
1594 West North Temple, Suite 1210
Salt Lake City, UT 84114

Reference:

Cane Creek Federal #11-1

Grand County, Utah

Dear Mr. Jones and Ms. Daniels:

Enclosed please find a "Sundry Notices and Reports on Wells" requesting approval to pull completion and re-run tubing and packer for the above referenced well.

Hunt Petroleum (AEC), Inc. expects to have a pulling unit available on Tuesday, September 3, 2002 to being this operation.

Please contact Mr. Mark Swisher at 713-871-3400 should you have any questions or require additional information.

Very truly yours,

Hunt Petroleum (AEC), Inc.

Victoria Guidry

Regulatory Coordinator

/vjg

**Enclosure** 

RECEIVED

SEP 0 3 2002

DIVISION OF OIL, GAS AND MINING

H:\...\Cane Creek Federal\CC 11-1

STATE OF UTAH			
DIVISION OF OIL, GAS AND	MINING	5. Lease Designation and Serial Number	
		4-46697 UTU-65972	
SUNDRY NOTICES AND REPORTS (	ON WELLS	Indian, Allottee or Tribe Name:     NA	
Do not use this form for proposals to drill new wells, deepen existing wells, or to Use APPLICATION FOR PERMIT TO DRILL OR DEEPEN to	reenter plugged and abandoned wells. orm for such purposes	7. Unit Agreement Name: Cane Creek	
1. Type of Well: OIL X GAS OTHER:		8. Well Name and Number: Cane Creek #30-1 Cane-Creek FED //-/	
2. Name of Operator		9. API Well Number:	
Hunt Petroleum (AEC), Inc.		43-019-31368	
3. Address and Telephone Number.		10. Field and Pool, or Wildcat	
P.O. Box 1350, Houston TX 77251-1350	713-871-3400	Wildcat	
4. Location of Well 3220 FAL 2060 FUL	713-871-3400		
Footages: 330 FNL & 1035 FWL  QQ,Sec., T., R., M.: NW/NW . Sec. 10 Toks Pone		County: Grand	
_RW/NWSec 30, 1203, R2UE		State: Utah	
11. CHECK APPROPRIATE BOXES TO INDICATE NA	ATURE OF NOTICE, REPORT, OR	OTHER DATA	
NOTICE OF INTENT (Submit in Duplicate)	SUBSEQUENT I (Submit Original F		
Abandon New Construction  Repair Casing Pull or Alter Casing  Change of Plans Recomplete  Convert to Injection Perforate	Abandon* Repair Casing Change of Plans Convert to Injection	New Construction Pull or Alter Casing Perforate Vent or Flare	
Fracture Treat or Acidize  Multiple Completion  Water Shut-Off	Cther	Water Shut-Off	
X Other Request for Extension of approved APD	Date of work completion		
Approximate date work will start September 2003	Report results of Multiple Completions and Re COMPLETION OR RECOMPLETION REPORT AN  Must be accompanied by a cement verification re	D LOG form.	
DESCRIBEPROPOSEDOR COMPLETED OPERATIONS (Clearly state all pertinent details, and vertical depths for all markers and zones pertinent to this work.)	give pertinent dates. If well is directionally drilled, g	ive subsurface locations and measured and true	
Hunt Petroleum (AEC), Inc. respectfully requests approved "Application For Permit to Drill" for the Cane Creek 7-1 and 11-1 wells were drilled in drilling program is currently being evaluated.	the above referenced well.	RE(11 17) MAR 3 1 2003	
		488 C.	
MIANIMIA . I I	oria Guidry Natory Coordinator	Date 3/28/03	
(This space for State use only)			



#### United States Department of the Interior

#### BUREAU OF LAND MANAGEMENT

Utah State Office P.O. Box 45155 Salt Lake City, UT 84145-0155

IN REPLY REFER TO UT-922

April 28, 2003

Intrepid Oil & Gas, L.L.C. Attn: Jan Podoll 700 17<sup>th</sup> Street, Suite 1700 Denver, Colorado

Re:

Cane Creek Unit

Grand & San Juan Counties, Utah

#### Gentlemen:

On April 25, 2003, we received an indenture dated April 23,2003, whereby Hunt Petroleum (AEC), Inc. resigned as Unit Operator and Intrepid Oil & Gas, L.L.C. was designated as Successor Unit Operator for the Cane Creek Unit, Grand and San Juan Counties, Utah.

This indenture was executed by all required parties and the signatory parties have complied with Sections 5 and 6 of the unit agreement. The instrument is hereby approved effective April 28, 2003. In approving this designation, the Authorized Officer neither warrants nor certifies that the designated party has obtained all required approval that would entitle it to conduct operations under the Cane Creek Unit Agreement.

Your statewide (Utah) oil and gas bond No. UTB000029 will be used to cover all operations within the Cane Creek Unit.

It is requested that you notify all interested parties of the change in unit operator. Copies of the approved instruments are being distributed to the appropriate federal offices, with one copy returned herewith.

Sincerely,

/s/ Robert A. Henricks

Robert A. Henricks Chief, Branch of Fluid Minerals

#### **Enclosure**

bcc: Field Manager - Moab (w/enclosure)

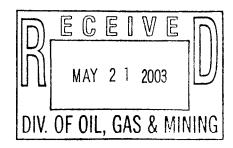
SITLA

Division of Oil, Gas & Mining Minerals Adjudication Group

File - Cane Creek Unit (w/enclosure)

Agr. Sec. Chron Fluid Chron

UT922:TAThompson:tt:4/28/03



## **Results of query for MMS Account Number UTU80000**

Production	API Number	Operator	Well Name	Well Status	Lease or CA Number	Inspection Item	Township	Range	Section	Quarter/Quarter	Fit
Production	4301931325	PETROLEUM	28-1 KANE SPRINGS	ТА	UTU48351	UTU80000X	<b>25</b> S	19E	28	SWSE	WILE
Production	4301931332	PETROLEUM	20-1 KANE SPRINGS	ТА	UTU54037	UTU80000X	26S	19E	20	SESW	BIG I
Production	4301931363	HUNT PETROLEUM (AEC) INC	7-1	OSI	UTU51239	UTU80000X	<b>25</b> S	19E	7	SENW	WILE
Production	4301931364	HUNT PETROLEUM (AEC) INC	11-1	GSI	UTU65972	UTU80000X	<b>26</b> S	19E	11	SENW	UND

DISCLAIMER for online data: No warranty is made by the BLM for use of the data for purposes not intended by the BLM.

# STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OU. GAS AND MINING

		DIVISION OF OIL, GAS AND MII		5. LEASE DESIGNATION AND SERIAL NUMBER:
	SUNDRY	NOTICES AND REPORTS	S ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME
	not use this form for proposals to drill ne drill horizontal lai PE OF WELL	ew wells, significantly deepen existing wells below cun sterals. Use APPLICATION FOR PERMIT TO DRILL fi	rent bottom-hole depth, reenter plugged wells, or to orm for such proposals.	7. UNIT or CA AGREEMENT NAME: Cane Creek Federal Unit
	OIL WELL	X GAS WELL ☐ OTHER _		8. WELL NAME and NUMBER: Cane Creek Federal #11-1
	weofoperator: nt Petroleum (AE(	C) Inc		9. API NUMBER:
3. AE	DDRESS OF OPERATOR:		PHONE NUMBER:	43-019-31364 10. FIELD AND POOL, OR WILDCAT:
	O. Box 1350 CITY	y Houston <sub>STATE</sub> TX <sub>ZIP</sub>	77251 713-871-3400	
	AMERICAN AND AND AND AND AND AND AND AND AND A	0' FNL & 2060' FWL		COUNTY: Grand
Q	TR/QTR, SECTION, TOWNSHIP, RANG	ge, meridian: SENW 11 265	19E	STATE: UTAH
11.		ROPRIATE BOXES TO INDICAT	E NATURE OF NOTICE, REPO	RT, OR OTHER DATA
	TYPE OF SUBMISSION		TYPE OF ACTION	
X	NOTICE OF INTENT (Submit in Duplicate)	ACIDIZE  ALTER CASING	DEEPEN	REPERFORATE CURRENT FORMATION
	Approximate date work will start:	CASING REPAIR	FRACTURE TREAT  NEW CONSTRUCTION	SIDETRACK TO REPAIR WELL  TEMPORARILY ABANDON
		CHANGE TO PREVIOUS PLANS	OPERATOR CHANGE	TUBING REPAIR
_		CHANGE TUBING	PLUG AND ABANDON	VENT OR FLARE
Ш	SUBSEQUENT REPORT (Submit Original Form Only)	CHANGE WELL NAME	PLUG BACK	WATER DISPOSAL
	Date of work completion:	CHANGE WELL STATUS	PRODUCTION (START/RESUME)	WATER SHUT-OFF
		COMMINGLE PRODUCING FORMATIONS	RECLAMATION OF WELL SITE	OTHER:
12	DESCRIPE PROPOSED OF CO	CONVERT WELL TYPE	RECOMPLETE - DIFFERENT FORMATION	
12.	DESCRIBE PROPOSED OR CU	JMPLETED OPERATIONS. Clearly show all p	pertinent details including dates, depths, volume	es, etc.
Fee Cor	deral Unit and In ncurrent with thi	ntrepid Oil & Gas, LLC	Inc. resigned as Operat was designated successo um (AEC), Inc. resigns successor Operator.	or Unit Operator.
				•
NAM	E (PLEASE PRINT) Melino	da Maxse	ппы Regulatory (	Coordinator
SIGN	ATURE Milinia.	Magre	DATEJune 24, 2	2003
This ap	pace for State use only)			RECEIVED

RECEIVED JUN 2 5 2003

DIV. OF OIL, GAS & MINING

# STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

FORM 9

		DIVISION OF OIL, GAS AN	DIMINING '		6. LEASE DESIGNATION AND SERVAL MU
	SUND	RY NOTICES AND DEDG	-		386 List below
1	Do not use the form the name of	RY NOTICES AND REPO	RTS ON WE	LLS	B. IF INDUMA, ALLOTTEE OR TRIBE HAND
1.	TYPE OF WELL	Hill new wells, significantly deepen extrine wells be to leterals. Use APPLICATION FOR PERMIT TO I	div criment potenti probo	apth, reentor plupped wells, or to	7. UNIT OF OA AGREEMENT NAME
	OIF AAICT	T R GYS METT C OLH			& WELL NAME and NUMBER:
z. Ir	NAME OF OPERATOR: INTROPIC OIL & GES, LLC				See List below
3,	ADDRESS OF OPENATOR				See List
	OO 17th Street	Denver STATE CO	<sub>7tp</sub> <b>80202</b>	(303) 296-3006	10. FIELD AND POOL, OR WILDCATI See List below
	POOTAGES AT BURFACE:				COUNTY: Grand
	OTWOTE, SECTION, TOWNSHIP, FV	ange meridian;		·	STAYE:
11.	CHECK APP	PROPRIATE BOXES TO INDIC	ATC NATIOE	05 NOW 05	<u> </u>
	TYPE OF SUBMISSION	TO TO INDIC	MIENATURE	OF NOTICE, REPO	RT, OR OTHER DATA
Z	NOTICE OF INTENT	ACROIZE		YPE OF ACTION	
-	(Outsmit in Duplicate)	ALTER CASING	☐ COLORER		REPERFORATE CURRENT PORMAT
	Approximate date work will alert	CASING REPAIR	FRACTURE		SIDETMACK TO REPAIR WELL
		CHANGE TO PREVIOUS PLANS	☐ NEW CONS		TEMPORARILY ABANDON
_		CHANGE TUBING	OPERATOR.		TUBING REPAIR
	SUBSEQUENT REPORT	CHANGE WELL NAME	PLUGANDA		VENT OR PLANE
	(arount custod Lotu colf.)		- Princibrak		WATER DISPOSAL
	Date of work completion:	CHANGE WELL STAYLES	PRODUCTIO	IN (START/REGLINE)	WATER SHUT-OFF
		COMMINGLE PRODUCING FORMATION CONVERT WELL TYPE	is 🔲 reglamatik	ON ON WELL SITE	OTHER:
bed Kar Kar	came operator for the form Springs Federal #19	MPLETED OPERATIONS. Charty show a I Oil & Gas, LLC accepted deel Mowing wells: -1A - UTU-53626 - API 430193 -19-34-1 - UTU-53624 - API 43	partment details incl position as succ 1324 - 800' FSI	essor operator for th L, 1918' FEL, 19-269	e Kane Springs Federal Unit a I-20E
Kar Kar Kar Kar Kan	nome operator for the forme operator for the forme Springs Federal #25 to Springs Federal #27 to Springs Federal #10 to Check #11-1 - UTU-6 to Borings Federal #36 to Check #11-1 - UTU-6 to Borings Federal #38 to Check #11-1 - UTU-6 to Borings Federal #38 to Check #11-1 - UTU-6 to Borings Federal #38 to Check #11-1 - UTU-6 to Borings Federal #38 to Check #11-1 - UTU-6 to Borings Federal #38 to Check #11-1 - UTU-6 to Check #11-1 - UTU	I VII & Gas, LLC accepted desi	Pertinent details incl gnation as succ 1324 - 800' FSI 01931334 - 934 310 - 1700' FEL 331 - 2333' FSL J' FNL, 2060' FV	Address depths, volument PASSOF operator for the L, 1918' FEL, 19-265 L' FNL, 1676' FEL, 34 L, 1650' FSL, 27-258 L, 2112' FEL, 10-265 VL, 22-268-19E	e Kane Springs Federal Unit a R-20E R-258-19E R-19E R-18E
bed Kar Kar Kan Kan Kan	nome operator for the forme operator for the forme Springs Federal #25 to Springs Federal #27 to Springs Federal #10 to Check #11-1 - UTU-6 to Borings Federal #36 to Check #11-1 - UTU-6 to Borings Federal #38 to Check #11-1 - UTU-6 to Borings Federal #38 to Check #11-1 - UTU-6 to Borings Federal #38 to Check #11-1 - UTU-6 to Borings Federal #38 to Check #11-1 - UTU-6 to Borings Federal #38 to Check #11-1 - UTU-6 to Check #11-1 - UTU	1011 & Gas, LLC accepted deel blowing wells: -1A - UTU-63626 - API 430193 -19-34-1 - UTU-53624 - API 43 -1 - UTU-65971 - API 4301931 -1 - UTU-47858 - API 4301931 35972 - API 4301931364 - 2220 -1 - UTU-50678 - API 4301931 -1 - UTU-54037 - API 4301931	I pertinent details inch gnation as succ 1324 - 800' FSI 01931334 - 934 310 - 1700' FEL 331 - 2333' FSL 0' FNL, 2060' FV 325 - 1900' FSL 332 - 1000' FSL	Address depths, volument PASSOF operator for the L, 1918' FEL, 19-265 L' FNL, 1676' FEL, 34 L, 1650' FSL, 27-258 L, 2112' FEL, 10-265 VL, 22-268-19E	e Kane Springs Federal Unit a 1-20E 1-258-19E -19E -18E -19E
bed Kar Kar Kan Kan Kan	name operator for the forme Springs Federal #19 ne Springs Federal #25 ne Springs Federal #27 ne Springs Federal #10 ne Creek #11-1 - UTU-6 ne Springs Federal #28 ne Springs Federal #20 springs Federal #20 ne Springs Federal #20	1011 & Gas, LLC accepted deel blowing wells: -1A - UTU-63626 - API 430193 -19-34-1 - UTU-53624 - API 43 -1 - UTU-65971 - API 4301931 -1 - UTU-47858 - API 4301931 35972 - API 4301931364 - 2220 -1 - UTU-50678 - API 4301931 -1 - UTU-54037 - API 4301931	# pertinent details inch gnation as succ 1324 - 800' FSI 01931334 - 934 310 - 1700' FEL 331 - 2333' FSL 1' FNL, 2060' FV 325 - 1900' FSL 332 - 1000' FSL	Adrig dates, depths, volument PSSOF operator for the L, 1918' FEL, 19-26S 1' FNL, 1676' FEL, 34- -, 1650' FSL, 27-25S -, 2112' FEL, 10-26S NL, 22-26S-19E -, 1900' FEL, 28-25S -, 2400' FWL, 20-26S	e Kane Springs Federal Unit a 1-20E 1-258-19E -19E -18E -19E
Kar Kar Kar Kar Kar Kar Kan	came operator for the form operator for the form operator for the form of Springs Federal #25 to Springs Federal #27 to Springs Federal #10 to Creek #11-1 - UTU-6 to Springs Federal #28-16 Springs Federal #20-16 Springs Federal #	1011 & Gas, LLC accepted deel blowing wells: -1A - UTU-63626 - API 430193 -19-34-1 - UTU-53624 - API 43 -1 - UTU-65971 - API 4301931 -1 - UTU-47858 - API 4301931 35972 - API 4301931364 - 2220 -1 - UTU-50678 - API 4301931 -1 - UTU-54037 - API 4301931	I pertinent details inch gnation as succ 1324 - 800' FSI 01931334 - 934 310 - 1700' FEL 331 - 2333' FSL 0' FNL, 2060' FV 325 - 1900' FSL 332 - 1000' FSL	Adrig dates, depths, voluments \$880° operator for the L, 1918° FEL, 19-265 \$1° FNL, 1676° FEL, 34- -, 1650° FSL, 27-258 -, 2112° FEL, 10-265 NL, 22-268-19E -, 1900° FEL, 28-258 -, 2400° FWL, 20-265	e Kane Springs Federal Unit a 1-20E 1-258-19E -19E -18E -19E
Kar Kar Kar Kar Kar Kar Kan	name operator for the forme Springs Federal #19 ne Springs Federal #25 ne Springs Federal #27 ne Springs Federal #10 ne Creek #11-1 - UTU-6 ne Springs Federal #28 ne Springs Federal #20 springs Federal #20 ne Springs Federal #20	1011 & Gas, LLC accepted deel blowing wells: -1A - UTU-63626 - API 430193 -19-34-1 - UTU-53624 - API 43 -1 - UTU-65971 - API 4301931 -1 - UTU-47858 - API 4301931 35972 - API 4301931364 - 2220 -1 - UTU-50678 - API 4301931 -1 - UTU-54037 - API 4301931	# pertinent details inch gnation as succ 1324 - 800' FSI 01931334 - 934 310 - 1700' FEL 331 - 2333' FSL 1' FNL, 2060' FV 325 - 1900' FSL 332 - 1000' FSL	Adrig dates, depths, volument PSSOF operator for the L, 1918' FEL, 19-26S 1' FNL, 1676' FEL, 34- -, 1650' FSL, 27-25S -, 2112' FEL, 10-26S NL, 22-26S-19E -, 1900' FEL, 28-25S -, 2400' FWL, 20-26S	e Kane Springs Federal Unit a 1-20E 1-258-19E -19E -18E -19E
Kar Kar Kar Kar Kar Kar Kan	came operator for the form operator for the form operator for the form of Springs Federal #25 to Springs Federal #27 to Springs Federal #10 to Creek #11-1 - UTU-6 to Springs Federal #28-16 Springs Federal #20-16 Springs Federal #	1011 & Gas, LLC accepted deel blowing wells: -1A - UTU-63626 - API 430193 -19-34-1 - UTU-53624 - API 43 -1 - UTU-65971 - API 4301931 -1 - UTU-47858 - API 4301931 35972 - API 4301931364 - 2220 -1 - UTU-50678 - API 4301931 -1 - UTU-54037 - API 4301931	# pertinent details inch gnation as succ 1324 - 800' FSI 01931334 - 934 310 - 1700' FEL 331 - 2333' FSL 1' FNL, 2060' FV 325 - 1900' FSL 332 - 1000' FSL	Adrig dates, depths, volument PSSOF operator for the L, 1918' FEL, 19-26S 1' FNL, 1676' FEL, 34- -, 1650' FSL, 27-25S -, 2112' FEL, 10-26S NL, 22-26S-19E -, 1900' FEL, 28-25S -, 2400' FWL, 20-26S	e Kane Springs Federal Unit a 1-20E 1-258-19E -19E -18E -19E
Kar Kar Kan	came operator for the form operator for the form operator for the form of Springs Federal #25 to Springs Federal #27 to Springs Federal #10 to Creek #11-1 - UTU-6 to Springs Federal #28-16 Springs Federal #20-16 Springs Federal #	1011 & Gas, LLC accepted deel blowing wells: -1A - UTU-63626 - API 430193 -19-34-1 - UTU-53624 - API 43 -1 - UTU-65971 - API 4301931 -1 - UTU-47858 - API 4301931 35972 - API 4301931364 - 2220 -1 - UTU-50678 - API 4301931 -1 - UTU-54037 - API 4301931	# pertinent details inch gnation as succ 1324 - 800' FSI 01931334 - 934 310 - 1700' FEL 331 - 2333' FSL 1' FNL, 2060' FV 325 - 1900' FSL 332 - 1000' FSL	Adrig dates, depths, volument PSSOF operator for the L, 1918' FEL, 19-26S 1' FNL, 1676' FEL, 34- -, 1650' FSL, 27-25S -, 2112' FEL, 10-26S NL, 22-26S-19E -, 1900' FEL, 28-25S -, 2400' FWL, 20-26S	e Kane Springs Federal Unit a 1-20E 1-258-19E -19E -18E -19E
Kar Kar Kar Kar Kar Kar Kan	came operator for the form operator for the form operator for the form of Springs Federal #25 to Springs Federal #27 to Springs Federal #10 to Creek #11-1 - UTU-6 to Springs Federal #28-16 Springs Federal #20-16 Springs Federal #	1011 & Gas, LLC accepted deel blowing wells: -1A - UTU-63626 - API 4301931 -19-34-1 - UTU-53624 - API 4301931 -1 - UTU-65971 - API 4301931 -1 - UTU-47858 - API 4301931 -1 - UTU-50678 - API 4301331 -1 - UTU-54037 - API 4301931	# pertinent details inch gnation as succ 1324 - 800' FSI 01931334 - 934 310 - 1700' FEL 331 - 2333' FSL 1' FNL, 2060' FV 325 - 1900' FSL 332 - 1000' FSL	Adrig dates, depths, voluments of the L., 1918' FEL, 19-265 1' FNL, 1676' FEL, 34-, 1650' FSL, 27-258-, 2112' FEL, 10-268 WL, 22-268-19E-, 1900' FEL, 28-258-, 2400' FWL, 20-268 Special Projects Ma 6/27/2003	e Kane Springs Federal Unit a F-20E F-25S-19E F-18E F-18E F-19E
Kar Kar Kan Kan Gan Kan	came operator for the form operator for the form operator for the form of Springs Federal #25 to Springs Federal #27 to Springs Federal #10 to Creek #11-1 - UTU-6 to Springs Federal #28-16 Springs Federal #20-16 Springs Federal #	1011 & Gas, LLC accepted deel blowing wells: -1A - UTU-63626 - API 4301931 -19-34-1 - UTU-53624 - API 4301931 -1 - UTU-65971 - API 4301931 -1 - UTU-47858 - API 4301931 -1 - UTU-50678 - API 4301331 -1 - UTU-54037 - API 4301931	# pertinent details inch gnation as succ #1324 - 800' FSI 01931334 - 934 \$10 - 1700' FEL 331 - 2333' FSL DETAIL - 2060' FSI 1325 - 1900' FSL 1325 - 1900' FSL	Adrig dates, depths, voluments of the L., 1918' FEL, 19-265 1' FNL, 1676' FEL, 34-, 1650' FSL, 27-258-, 2112' FEL, 10-268 WL, 22-268-19E-, 1900' FEL, 28-258-, 2400' FWL, 20-268 Special Projects Ma 6/27/2003	e Kane Springs Federal Unit a R-20E R-25S-19E R-19E R-18E R-19E

#### **OPERATOR CHANGE WORKSHEET**

#### ROUTING

1. GLH 2. CDW 3. FILE

#### X Change of Operator (Well Sold)

4. Is the new operator registered in the State of Utah:

5. If NO, the operator was contacted contacted on:

Designation of Agent/Operator

06/30/2003

2029416-0161

Operator Name Change

Merger

The operator of the well(s) listed below	has char	nged, e	ffective	:	04/28/20	03		
FROM: (Old Operator):				<b>TO:</b> ( New O	perator):			
HUNT PETROLEUM CORPORATION				Intrepid Oil &	Gas, LLC			
1601 Elm Street, Suite 3400				700 17th Stree	t, Suite 1700	)		
Dallas, TX 75201				Denver, CO 80	0202			
Phone: 1-(214) 880-8914				Phone: 1-(303	) 296-3006			
Account No. N 2180				Account No.	•			
CA	lo.			Unit:	Kane Spri	ngs & Can	e Creek	
WELL(S)					<del></del>			
	SEC	TW	1	API NO	ENTITY	LEASE	WELL	WELL
NAME	RNO				NO	TYPE	TYPE	STATUS
Kane Springs Unit								
KANE SPRINGS FED 27-1	27	250S	190E	4301931310	11180	Federal	ow	P
KANE SPRINGS FED 19-1A	19			4301931324	11353	Federal	OW	P
KANE SPRINGS FED 28-1	28	250S	190E	4301931325	11354	Federal	OW	S
KANE SPRINGS FED 10-1	10	250S	180E	4301931331	11414	Federal	OW	P
KANE SPRINGS FED 20-1	20	260S	190E	4301931332	11670	Federal	OW	S
KANE SPRINGS FED 25-19-34-1	34	250S	190E	4301931334	11521	Federal	ow	P
					ļ			
Cane Creek Unit		<del> </del>			-	-		
CANE CREEK FED 11-1	$-\frac{1}{11}$	2609	190E	4301931364	13477	Federal	OW	P
CANE CREEK FED 11-1	-   11	2005	IJUL	1301331301	13 17 7	1		
			-					1
		+						
		1						

YES Business Number:

6. (R649-9-2)Waste Management Plan has been received on:	IN PLACE		
<ol> <li>Federal and Indian Lease Wells: The BLM and or operator change for all wells listed on Federal or India</li> </ol>	_	_	- ·
or operator change for an wens fisted on rederal or india	in leases on:	BLM 04/28/2003 B	IAn/a
3. Federal and Indian Units:			***
The BLM or BIA has approved the successor of unit op	perator for wells listed	on: <u>04/28/2003</u>	
Federal and Indian Communization Agreen	•	,	
The BLM or BIA has approved the operator for all wel	iis iisted within a CA (	on: n/a	
0. Underground Injection Control ("UIC") TI	he Division has appro	ved UIC Form 5, Transfer	of Authority to
Inject, for the enhanced/secondary recovery unit/project			N/A
DATA ENTRY:			
. Changes entered in the Oil and Gas Database on:	07/16/2003		
•			
Changes have been entered on the Monthly Operator C	hange Spread Sheet	on: <u>07/16/2003</u>	
. Bond information entered in RBDMS on:	N/A		
. Done microard on the Division.			
Fee wells attached to bond in RBDMS on:	N/A		
TATE WELL (C) DOND VEDICATION			
STATE WELL(S) BOND VERIFICATION:  State well(s) covered by Bond Number:	N/A		
. State won(s) covered by Bond Number.	IV/A		
FEDERAL WELL(S) BOND VERIFICATION:			· · · · · · · · · · · · · · · · · · ·
. Federal well(s) covered by Bond Number:	UTB000029		
NDIAN WELL (C) DOND VEDICATION			
NDIAN WELL(S) BOND VERIFICATION:  Indian well(s) covered by Bond Number:	NI/A		
. Indian wen(s) covered by Bond Number.	N/A		
FEE WELL(S) BOND VERIFICATION:			
. (R649-3-1) The NEW operator of any fee well(s) listed c	covered by Bond Num	ber N/A	
. The FORMER operator has requested a release of liability		<u>N/A</u>	
The Division sent response by letter on:	N/A	·	
EASE INTEREST OWNER NOTIFICATION	•		
. (R649-2-10) The FORMER operator of the fee wells has		formed by a letter from the	Division
of their responsibility to notify all interest owners of this c	change on:	N/A	
COMMENTS:			
ommen 13.			

**STATE OF UTAH** 

(5/2000)

DEPARTMENT OF NATURAL RESOURCES	-
DIVISION OF OIL, GAS AND MINING	5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-65972
SUNDRY NOTICES AND REPORTS ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	7. UNIT or CA AGREEMENT NAME: Cane Creek Federal
1. TYPE OF WELL  OIL WELL  GAS WELL  OTHER  OTHER	8. WELL NAME and NUMBER: 11-1
2. NAME OF OPERATOR:	9. API NUMBER:
Intrepid Oil & Gas, LLC 3. ADDRESS OF OPERATOR: IPHONE NUMBER:	019-31364  10. FIELD AND POOL, OR WILDCAT:
1700-17th St. Ste 1700 <sub>CITY</sub> Denver STATE CO 719 80202 (303) 296-3006	Wildcat
4. LOCATION OF WELL  FOOTAGES AT SURFACE: 2,220' FNL & 2,060' FWL 42480 90 Y - 109. 79330 4245819 Y  OTRIQTIR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SENW 11 26S 19E  109,76457	COUNTY: Grand STATE: UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT	RT, OR OTHER DATA
TYPE OF SUBMISSION TYPE OF ACTION	
NOTICE OF INTENT (Submit in Duplicate)  Approximate date work will start:  4/1/2004  CHANGE TO PREVIOUS PLANS  CHANGE TUBING  PLUG AND ABANDON  CHANGE WELL NAME  DEEPEN  FRACTURE TREAT  NEW CONSTRUCTION  OPERATOR CHANGE  PLUG AND ABANDON  PLUG BACK	REPERFORATE CURRENT FORMATION  SIDETRACK TO REPAIR WELL  TEMPORARILY ABANDON  TUBING REPAIR  VENT OR FLARE  WATER DISPOSAL
(Submit Original Form Only)  Date of work completion:  CHANGE WELL STATUS  PRODUCTION (START/RESUME)  RECLAMATION OF WELL SITE  CONVERT WELL TYPE  RECOMPLETE - DIFFERENT FORMATION  12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volume	WATER SHUT-OFF  ✓ OTHER: Re-enter & Extend  Existing Horiz. Lateral
Intrepid Oil & Gas, LLC respectively requests permission to re-enter the existing Cane Creetits existing horizontal lateral another 1,250' +/- to a new MD of 11,661' and a new TVD of 7,6 [Please see attached proposed directional survey plan by Pathfinder Energy Services along BOP Equipment - See attached BOP description and schematics.  Mud Program - In extending the existing horizontal lateral, we plan to use drilling fluids having Mud Type = 80/20 Oil Base Mud; Mud Weight = 10-16; Viscosity = 50-60; F/-	of the following properties:
Casing Program - In addition to the existing casing of the original well bore, we plan to run a length of 4-1/2" liner into the lateral portion of the well (no cement to be us	
Drilling Cuttings - Due to location constraints to avoid disruption of arch sites, the original we system. We plan to employ this same type closed loop system in drilling the csg. wt. limits us to a 6" bit and the planned hole extension is 1,250', the verminimal and we plan to dispose of them into the pit associated with the recommendatively OK'd by BLM & (State DOGM -see attached Sundry)	nis extension. Since the existing 7" plume of cuttings is expected to be
NAME (PLEASE PRINT) Alan W. Bohling (432) 498-8662 TITLE Regulatory Agent	- Intrepid Oil & Gas, LLC
SIGNATURE Claub Bolling DATE 3/11/2004	COPY SENT TO OPERATO
	1 6 2004 L GAS & MINING

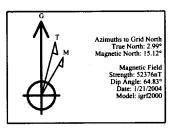
•	STATE OF UTAH	050	FORM 9
ı	DEPARTMENT OF NATURAL RESOURG DIVISION OF OIL, GAS AND MIN		5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-65972
SUNDRY	NOTICES AND REPORTS	ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A
Do not use this form for proposals to drill ne	ew wells, significantly deepen existing wells below curre	ont bottom-hole depth, reenter plugged wells, or to	7. UNIT OF CA AGREEMENT NAME:
drill horizontal la	terals. Use APPLICATION FOR PERMIT TO DRILL for	m for such proposals.	Cane Creek Federal  8. WELL NAME and NUMBER:
OIL WELL	GAS WELL OTHER		11-1
2. NAME OF OPERATOR: Intrepid Oil & Gas, LLC			9. API NUMBER: 019-31364
3. ADDRESS OF OPERATOR: 1700-17th St. Ste 1700 <sub>CITY</sub>	Denver STATE CO ZIP 8	PHONE NUMBER: (303) 296-3006	10. FIELD AND POOL, OR WILDCAT: Wildcat
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2,220'	FNL & 2,060' FWL	The second of th	county: Grand
QTR/QTR, SECTION, TOWNSHIP, RAN	ge, meridian: SENW 11 26S 19	9E	STATE: UTAH
11. CHECK APPF	ROPRIATE BOXES TO INDICATE	E NATURE OF NOTICE, REPO	ORT, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
✓ NOTICE OF INTENT	ACIDIZE	DEEPEN	REPERFORATE CURRENT FORMATION
(Submit in Duplicate)	ALTER CASING	FRACTURE TREAT	SIDETRACK TO REPAIR WELL
Approximate date work will start:	CASING REPAIR  CHANGE TO PREVIOUS PLANS	NEW CONSTRUCTION OPERATOR CHANGE	TEMPORARILY ABANDON TUBING REPAIR
4/1/2004	CHANGE TUBING	PLUG AND ABANDON	VENT OR FLARE
SUBSEQUENT REPORT	CHANGE WELL NAME	PLUG BACK	WATER DISPOSAL
· (Submit Original Form Only)	CHANGE WELL STATUS	PRODUCTION (START/RESUME)	WATER SHUT-OFF
Date of work completion:	COMMINGLE PRODUCING FORMATIONS	RECLAMATION OF WELL SITE	✓ other: Proposed Disposition
	CONVERT WELL TYPE	RECOMPLETE - DIFFERENT FORMATION	Of Drilling Cuttings
12. DESCRIBE PROPOSED OR CO	OMPLETED OPERATIONS. Clearly show all pe	ertinent details including dates, depths, volum	nes, etc.
	spectively requests permission to extension of existing lateral of the		the Cane Creek #2-1 to dispose of
enough room for a reserve casing weight set in this w 1000'-1250' of additional h lateral extension into the p by Mr. Eric Jones of BLM- Doucet's instructions that	oit associated with the current drilli Moab, Utah and also has been dis	We will be using a closed loop ize to 6" As a result, the anticip e are, therefore requesting perring well, Cane Creek #2-1. This scussed with Mr. Dan Jarvis of th this Sundry Notice which we	drilling system. The existing 7" atted volumes of cuttings from the mission to put the cuttings from this shas been discussed and approved
10.1112 (1.22.102.111.11)	ohling (432) 498-8662		nt - Intrepid Oil & Gas, LLC
SIGNATURE <u>Clank</u>		DATE 3/11/2004	
The state of the s	Accepted by the		
(This space for State use only)	Utah Division of Oil, Gas and Mining	Federal Approval Of This Action Is Necessary	RECEIVED
Date	3/3/104	· (	MAR 1 6 2004
(5/2000) <b>By:</b>	Orditions of Appril	4	OF OIL, GAS & MINING
<b>*</b> 366	CONDITIONS OF THE		

## **PURE Resources** Kane Springs 11-1 Grand County, Utah

Geodetic System:
Universal Transverse Mercator (USfeet)
Ellipsoid: Clarke 1866
Zone: UTM Zone 13, North 108W to 102W
Magnetic Model: igrf2000
System Datum: Mean Sea Level
Local North: Grid North



				;	SECTION DE	ETAILS				
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1 2	9847.00 11161.06		124.99 124.32	7552.91 7654.10	-1508.48 -2253.16	1884.83 2961.99	0.00 0.47	0.00 -173.87	2413.42 3721.58	PBHL



TARGET DETAILS

Name

TVD

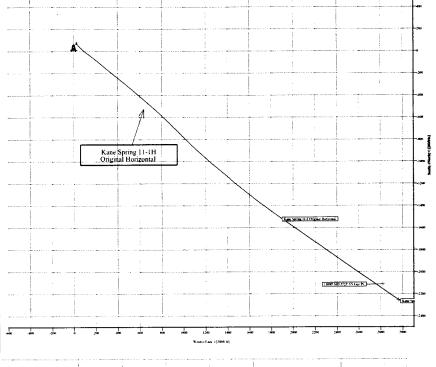
FIELD DETAILS Kane Springs Grande County, Utah USA

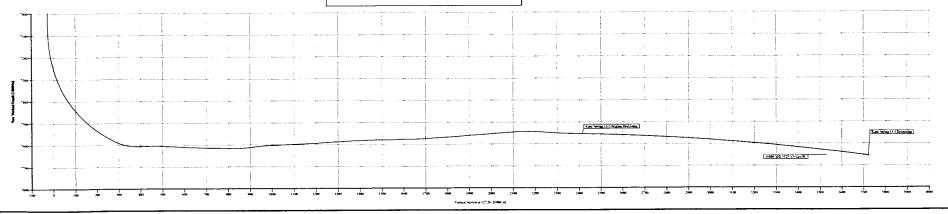
Geodetic System: Universal Transverse Mercator Ellipsoid: ED50 (International 1924) Zone: UTM Zone 13, North 108W to 102W Magnetic Model: igrf2000

System Datum: Mean Sea Level Local North: Grid North

		B ( C 3 40 3 1	11.75 30	20.40 8-1	.	Place Kane Sy	ring (1)-( Deepening (Kane Sprir	: 11-1 Receip Kane Spring 11-1 (high	sai Horizontai i
	1000' MD 3523' VS Geo Pt.	7652.40 -21		20.58 Poi 61.99 Poi			t round By: Ky	r Marap Date: 3 ( 2004	
P	BHL	7654.10 -22	53.16 29	01.99 FOI	181		( borket	Date:	
							Resident	Date	
						1	Approved	Date	
					and the second of the second				
						i		1	
				- 1		1		1 1	
- 1		!				1			
	1	į.		i				1	
4 .		anamakaan oo keesa							
								1 :	

+N/-S +E/-W Shape





#### **PathFinder**

#### Planning Report - Geographic

Company: PURE Resources Field:

Kane Springs Kane Spring #11-1

Site: Well: Kane Spring #11-1 Reentry
Wellpath: Kane Spring 11-1 Original Hori

3/5/2004 Date:

Time: 07:34:53

Page:

Co-ordinate(NE) Reference: Site: Kane Spring #11-1, Grid North

Vertical (TVD) Reference: Section (VS) Reference: Plan:

System: Mean Sea Level Well (0.00N, 0.00E, 127.26Azi) Kane Spring 11-1 Deepening

Kane Springs Grande County, Utah

USA

Map System: Universal Transverse Mercator Geo Datum: ED50 (International 1924)

Sys Datum: Mean Sea Level

Map Zone:

UTM Zone 13, North 108W to 102W

Coordinate System: Geomagnetic Model: Site Centre igrf2000

Site:

Kane Spring #11-1

Section 11

Site Position: Geographic From: Position Uncertainty:

Ground Level:

0.00 ft 0.00 ft Northing: 14036507.92 ft 269900.72 ft Easting:

Latitude: Longitude:

16.578 N 38 33 109 47 34.070 W

North Reference: **Grid Convergence:** 

Grid -2.99 deg

0.00 ft

Kane Spring #11-1 Reentry Well:

Well Position: +N/-S 0.00 ft 0.00 ft Easting:

Northing: 14036507.92 ft 269900.72 ft

Latitude:

**Drilled From:** 

Slot Name:

38 33 16.578 N

Surface

+E/-W **Position Uncertainty:** 

0.00 ft

Longitude:

+E/-W

109 47 34.071 W

Wellpath: Kane Spring 11-1 Original Hori

Current Datum: Magnetic Data:

Field Strength:

Principal:

Vertical Section:

SITE

Depth From (TVD)

0.00

1/21/2004 52376 nT

0.00 ft Height

+N/-S

ft

0.00

Tie-on Depth: **Above System Datum:** Declination: Mag Dip Angle:

12.13 deg 64.83 deg Direction

Mean Sea Level

ft deg 0.00 127.26

Kane Spring 11-1 Deepening Plan:

Date Composed: Version: Tied-to:

3/1/2004

From: Definitive Path

Plan Section Information

					_					
MD	Incl	Azim	TVD	+N/-S	+E/-W	DLS	Build	Turn	TFO	Target
ft	deg	deg	ft	ft	ft	deg/100ft	deg/100ft	deg/100ft	deg	
9847.00	88.67	124.99	7552.91	-1508.48	1884.83	0.00	0.00	0.00	0.00	PBHL
11161.06	82.49	124.32	7654.10	-2253.16	2961.99	0.47	-0.47	-0.05	-173.87	

Section 1: Start DLS 0.47 TFO -173.87

MĐ ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100f	Build t deg/100f	Turn t deg/100ft	TFO deg	
9847.00	88.67	124.99	7552.91	-1508.48	1884.83	2413.42	0.00	0.00	0.00	0.00	
9900.00	88.42	124.96	7554.25	-1538.86	1928.25	2466.36	0.47	-0.47	-0.05	-173.87	
10000.00	87.95	124.91	7557.42	-1596.10	2010.18	2566.23	0.47	-0.47	-0.05	-173.87	
10100.00	.87.48	124.86	7561.41	-1653.25	2092.15	2666.06	0.47	-0.47	-0.05	-173.87	
10200.00	87.01	124.81	7566.21	-1710.31	2174.13	2765.86	0.47	-0.47	-0.05	-173.87	
10300.00	86.54	124.76	7571.84	-1767.27	2256.13	2865.60	0.47	-0.47	-0.05	-173.86	
10400.00	86.07	124.71	7578.28	-1824.13	2338.14	2965.30	0.47	-0.47	-0.05	-173.86	
10500.00	85.60	124.66	7585.54	-1880.88	2420.15	3064.93	0.47	-0.47	-0.05	-173.86	
10600.00	85.13	124.61	7593.62	-1937.53	2502.16	3164.50	0.47	-0.47	-0.05	-173.85	
10700.00	84.66	124.56	7602.52	-1994.07	2584.16	3264.00	0.47	-0.47	-0.05	-173.85	
10800.00	84.19	124.51	7612.24	-2050.48	2666.15	3363.41	0.47	-0.47	-0.05	-173.85	
10900.00	83.72	124.46	7622.77	-2106.78	2748.12	3462.74	0.47	-0.47	-0.05	-173.84	
11000.00	83.25	124.40	7634.11	-2162.96	2830.07	3561.97	0.47	-0.47	-0.05	-173.84	
11100.00	82.78	124.35	7646.27	-2219.01	2911.99	3661.10	0.47	-0.47	-0.05	-173.83	
11161.06	82.49	124.32	7654.10	-2253.16	2961.99	3721.58	0.47	-0.47	-0.05	-173.82	

#### **PathFinder** Planning Report - Geographic

Company: PURE Resources
Field: Kane Springs
Site: Kane Spring #11-1
Well: Kane Spring #11-1 Reentry
Wellpath: Kane Spring 11-1 Original Hori

Date: 3/5/2004 Time: 07:34:53 Page Co-ordinate(NE) Reference: Site: Kane Spring #11-1, Grid North

2

Vertical (TVD) Reference: Section (VS) Reference: Plan:

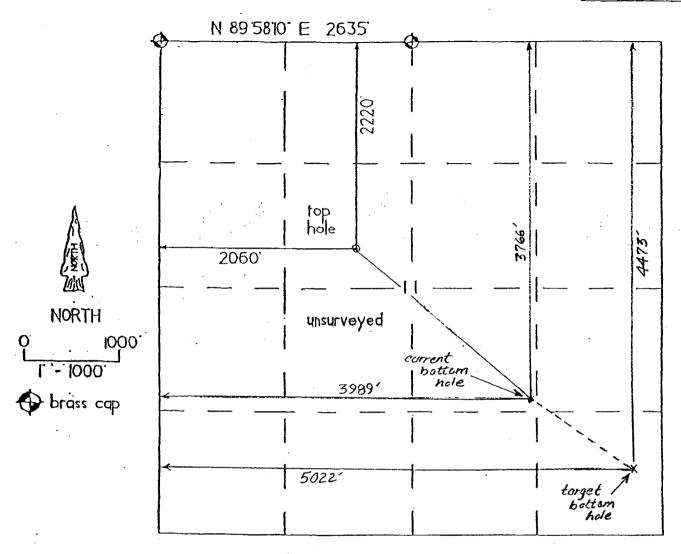
System: Mean Sea Level Well (0.00N,0.00E,127.26Azi) Kane Spring 11-1 Deepening

Survey

						Мар	Map	< I.	titude>		Long	itude>
MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	Northing ft	Easting ft	Deg M				Sec
9847.00	88.67	124.99	7552.91	-1508.48	1884.83	14034999.44	271785.55	38 33	2.683 N	109	47	9.431 W
9900.00	88.42	124.96	7554.25	-1538.86	1928.25	14034969.07	271828.97	38 33	2.406 N	109	47	8.866 W
10000.00	87.95	124.91	7557.42	-1596.10	2010.18	14034911.83	271910.90	38 33	1.884 N	109	47	7.801 W
10100.00	87.48	124.86	7561.41	-1653.25	2092.15	14034854.68	271992.87	38 33	1.363 N	109	47	6.735 W
10200.00	87.01	124.81	7566.21	-1710.31	2174.13	14034797.62	272074.85	38 33	0.843 N	109	47	5.669 W
10300.00	86.54	124.76	7571.84	-1767.27	2256.13	14034740.66	272156.85	38 33	0.324 N	109	47	4.602 W
10400.00	86.07	124.71	7578.28	-1824.13	2338.14	14034683.80	272238.86	38 32	59.806 N	109	47	3.536 W
10500.00	85.60	124.66	7585.54	-1880.88	2420.15	14034627.04	272320.87	38 32	59.289 N	109	47	2.470 W
10600.00	85.13	124.61	7593.62	-1937.53	2502.16	14034570.39	272402.88	38 32	58.773 N	109	47	1.404 W
10700.00	84.66	124.56	7602.52	-1994.07	2584.16	14034513.86	272484.88	38 32	58.258 N	109	47	0.338 W
10800.00	84.19	124.51	7612.24	-2050.48	2666.15	14034457.44	272566.87	38 32	57.744 N	109	46	59.272 W
10900.00	83.72	124.46	7622.77	-2106.78	2748.12	14034401.14	272648.84	38 32	57.231 N	109		58.207 W
11000.00	83.25	124.40	7634.11	-2162.96	2830.07	14034344.96	272730.79	38 32	56.720 N	109		57.142 W
11100.00	82.78	124.35	7646.27	-2219.01	2911.99	14034288.92	272812.71	38 32	56.210 N		46	56.077 W
11161.06	82.49	124.32	7654.10	-2253.16	2961.99	14034254.76	272862.71	38 32	55.899 N	109	46	55.427 W

Targets

Name	Description Dip.	Dir.	TVD ft	+N/-S ft	+E/-W	Map Northing ft	Map Easting ft	< Latitude> Deg Min Sec	< Longitude> Deg Min Sec
11000' MD 35	23' VS Geo Pt.		7652.40	-2111.72	2820.58	14034396.20	272721.30	38 32 57.220 N	109 46 57.294 W
-Plan out by	/ 187.29 at		7652.40	-2245.86	2951.30	14034262.06	272852.02	38 32 55.965 N	109 46 55.566 W
PBHL			7654.10	-2253.16	2961.99	14034254.76	272862.71	38 32 55.899 N	109 46 55.427 W
-Plan hit tar	get								



#### Well Location Description

Intrepid Oil & Gas LLC

Cane Creek Federal No. 11-1

2220' FNL & 2060' FWL (top hole)

86.138 N & 2.488.168 E - Utoh Central NAD 27 (top hole)

6147' grd. el. from previous location

4473' FNL & 5022' FWL (bottom hole target) - projected

Grand County. UT

Gerald

25 November 1997

The above is true and correct to my knowledge

HUDDLESTON LAND SURVEYING - BOX KK - CORTEZ. CO - (970) 565 -3330

#### 3. BLOW OUT PREVENTEL OP) EQUIPMENT

Cane Creek Federal #11-1 API # 43-(\_\_-31364-00

Intrepid Oil & Gas, LLC.'s minimum specifications for pressure control equipment are as follows:

Ram Type: 11" Hydraulic double, 10,000 psi w.p.

BOP systems will be consistent with API RP 53 and Onshore Oil and Gas Order No. 2. Pressure tests of the surface casing and all BOP equipment potentially subject to pressure will be conducted before drilling the surface casing shoe. Blowout preventer controls will be installed prior to drilling the surface casing shoe and will remain in use until the well is completed or abandoned. Ram preventers will be inspected and operated each trip (no more than once a day is necessary), and annular preventers will be inspected and operated weekly to ensure good mechanical working order. These inspections shall be recorded in the drilling log and in the daily drilling report.

Ram type preventers and associated equipment shall be tested to approved stack working pressure if isolated by test plug or to 70 percent of internal yield pressure of casing. Pressure shall be maintained for at least 10 minutes or until requirements of test are met, whichever is longer. If a test plug is utilized, no bleed-off pressure is acceptable. For a test not utilizing a test plug, if a decline in pressure of more than 10 percent in 30 minutes occurs, the test shall be considered to have failed. Valve on casing head below test plug shall be open during test of BOP stack.

Annular type preventers (if used) shall be tested to 50 percent of rated working pressure. Pressure shall be maintained at least 10 minutes or until provisions of test are met, whichever is longer:

Valves shall be tested from working pressure side during BOPE tests with all down stream valves open.

When testing the kill line valve(s) the check valve shall be held open or the ball removed. A BOPE pit level drill shall be conducted weekly for each drilling crew.

The BOP and related equipment shall meet the minimum requirements of Onshore Oil and Gas. Order No. 2 for equipment and testing requirements, procedures, etc., and individual components shall be operable as designed. Chart recorders shall be used for all pressure tests.

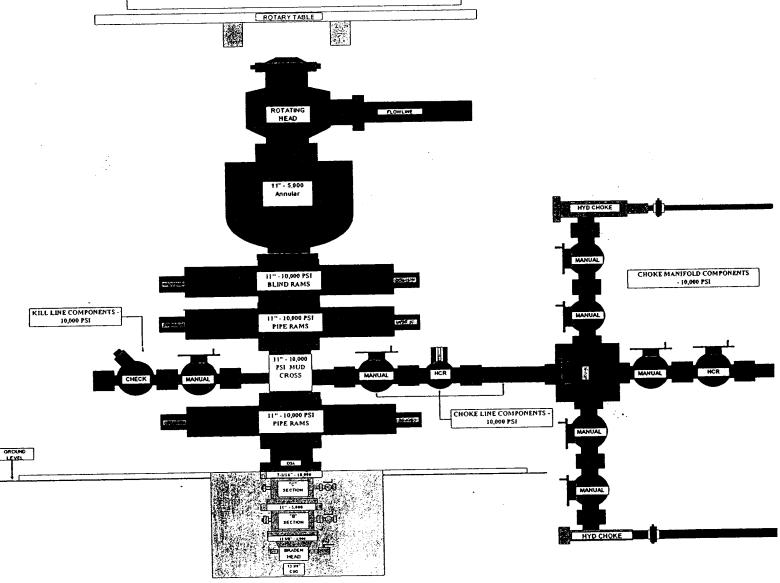
Pressure tests shall apply to all related well control equipment.

All of the above described tests and/or drills shall be recorded in the drilling log. Test charts, with individual test results identified, shall be maintained on location while drilling and shall be made available to a BLM representative upon request.

Pressure tests shall apply to all related well control equipment.

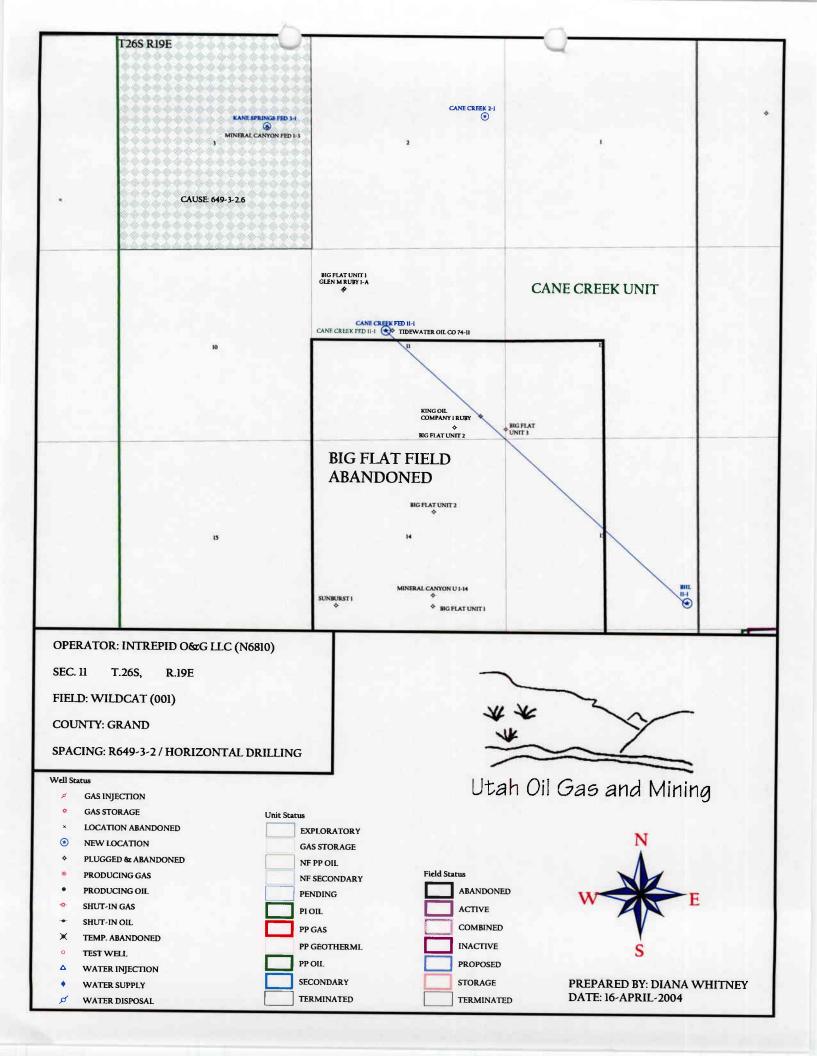
- a. The size and rating of the BOP stack is shown on the attached diagram. Although a rig has not been chosen to drill this well, most of the equipment for this depth of hole in the area use a 11", 10,000 psi working pressure blowout preventor.
- b. A choke line and a kill line are to be properly installed. The kill line is <u>not</u> to be used as a fill-up line.
- c. The accumulator system shall have a pressure capacity to provide for repeated operation of hydraulic preventers.
- d. Drill string safety valve(s), to fit <u>all</u> tools in the drill string, are to be maintained on the rig floor while drilling operations are in progress.

#### Pure Resources Cane Creek #11-1 13-5/8" 10K BOPE



## WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 03/16/2004	API NO. ASSIGNED: 43-019-31364					
WELL NAME: CANE CREEK FED 11-1  OPERATOR: INTREPID OIL & GAS LLC ( N6810 )  CONTACT: ALAN BOHLING  PROPOSED LOCATION:  SENW 11 260S 190E  SURFACE: 2220 FNL 2060 FWL  BOTTOM: 4473 FNL 5022 FWL  GRAND  BIG FLAT ( 170 )  LEASE TYPE: 1 - Federal  LEASE NUMBER: UTU-65972  SURFACE OWNER: 1 - Federal	PHONE NUMBER: 432-498-8662  INSPECT LOCATN BY: / /  Tech Review Initials Date  Engineering  Geology  Surface  LATITUDE: 38.55690					
PROPOSED FORMATION: CNCR COALBED METHANE WELL? NO	LONGITUDE: 109.79330					
Plat  Plat  Bond: Fed[1] Ind[] Sta[] Fee[]  (No. UTB000029 )  Potash (Y/N)  Oil Shale 190-5 (B) or 190-3 or 190-13  Water Permit  (No. Municipal )  RDCC Review (Y/N)  (Date: )  Fee Surf Agreement (Y/N)	LOCATION AND SITING:  R649-2-3.  Unit CANE CREEK  R649-3-2. General  Horitonto  Siting: 460 From Qtr/Qtr & 920' Between Wells  R649-3-3. Exception  Drilling Unit  Board Cause No:  Eff Date:  Siting:  R649-3-11. Directional Drill					
COMMENTS:  STIPULATIONS:						





State of Utah

Department of Natural Resources

Division of Oil, Gas & Mining

ROBERT L. MORGAN Executive Director

LOWELL P. BRAXTON Division Director MICHAEL O. LEAVITT Governor

OLENE S. WALKER Lieutenant Governor

# CONDITIONS OF APPROVAL TO DISPOSE OF CUTTINGS IN CANE CREEK 2-1 PIT

Well Name and Number:

Cane Creek Federal 11-1

API Number:

43-019-31364

Operator:

Intrepid Oil & Gas, LLC

Reference Document:

Sundry Notice dated March 11, 2004, received by DOGM March 16, 2004

#### **Approval Conditions:**

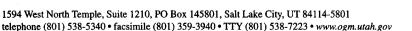
- 1. Notify the Division at least 24 hours prior to commencing disposal operations. Please call Dan Jarvis at 801-538-5338.
- 2. Acceptable cleanup levels and physical attributes shall be met or the cuttings shall be hauled to an acceptable disposal facility for proper remediation see R649-3-16-3. Because the Cane Creek 2-1 (API # 43-019-31396) pit was cut into solid rock, the concern is that there isn't sufficient soil or material for proper dilution for cleanup or for ultimate stability and appearance of the reclaimed surface (As Gil Hunt discussed with Libby Einhorn).
- 3. All other requirements for notice and reporting in the Oil and Gas Conservation General Rules shall apply.

Dustin K. Doucet

April 2, 200<sup>2</sup>

Petroleum Engineer

Date





### **United States Department of the Interior**

#### BUREAU OF LAND MANAGEMENT

Utah State Office P.O. Box 45155 Salt Lake City, Utah 84145-0155

IN REPLY REFER TO: 3160 (UT-922)

April 19, 2004

Memorandum

To:

Assistant Field Office Manager Resources, Moab District

From:

Michael Coulthard, Petroleum Engineer

Subject:

2004 Plan of Development Cane Creek Unit,

Grand and San Juan Counties, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following well will be re-entered with a new horizontal completion. The work will be conducted in calendar year 2004 within the Cane Creek Unit, Grand County, Utah.

API#

WELL NAME

LOCATION

(Proposed PZ Cane Creek)

43-019-31364 Cane Creek Federal 11-1 Sec 11 T26S R19E 2220 FNL 2060 FWL BHL Sec 11 T26S R19E 4473 FNL 5022 FWL

This office has no objection to permitting the well at this time.

/s/ Michael L. Coulthard

bcc: File - Cane Creek Unit

Division of Oil Gas and Mining

Agr. Sec. Chron Fluid Chron

MCoulthard:mc:4-19-04

## DIVISION OF OIL, GAS AND MINING

#### **SPUDDING INFORMATION**

Name of Company:	<u>INTREPID</u>	OIL & GAS LLC		
Well Name:	CANE CRE	EK FED 11-1		
Api No: 43-019-31	364	Lease Type:	FEDERAL	
Section11Townshi	p <u> 26S</u> Range <u> 1</u>	<b>9E</b> County	GRAND	
Drilling Contractor	UNIT	RIG	G #	
SPUDDED:  Date	05/15/04			
Time				
How	ROTARY			
Drilling will comme	nce:			<u>-</u>
Reported by	FRANK GILLIS	PIE		
Telephone #	1-505-330-6530			
Date 05/17/2004	Signed	CHD		

Form 3160-5 (September 2001)

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

#### SUNDRY NOTICES AND REPORTS ON WELLS

FORM APPROVED	
OM B No. 1004-0135	
Expires: January 31, 200:	1

_		
5.	Lease Serial No.	
	TITTI CCOTS	

SOMBILL						
Do not use th abandoned we	If Indian, Allottee or Tribe Name     N/A					
SUBMIT IN TRI	7. If Unit or CA/Agreement, Name and/or No.  Cane Creek Federal					
1. Type of Well  ✓ Oil Well	8. Well Name					
2. Name of Operator Intrepid Oil &	& Gas LLC			9. API Well	No.	
3a Address 700 - 17th St., Suite 1700 Denv	rer, CO 80202	3b. Phone No. (include 303/296-3006	area code)	43-019-3 10. Field and	1364-00 Pool, or Exploratory Area	
4. Location of Well (Footage, Sec.,	T., R., M., or Survey Description)			Wildcat	, oo, or <u></u> , prosumoty : <u></u>	
2220' FNL & 2060' FWL SENW, Sec. 11, T-26-S, R-19-1	•	le Location (estimated) WL; Sec. 11, T-26-S, R		11. County or Parish, State  Grand County, Utah		
12. CHECK A	PPROPRIATE BOX(ES) TO	INDICATE NATUR	E OF NOTICE, R	EPORT, OR	OTHER DATA	
TYPE OF SUBMISSION		TYF	E OF ACTION			
Notice of Intent	Acidize Alter Casing Casing Repair	Deepen Fracture Treat New Construction	Production (Standardion Recomplete	art/Resume)	Water Shut-Off Well Integrity Other All Re-entry Drilling	
✓ Subsequent Report  Final Abandonment Notice	Change Plans Convert to Injection	Plug and Abandon Plug Back	Temporarily Al Water Disposal		& TA Activity from 05/12/04 - 06/16/04.	
	t the control to injection				03/14/07 - 00/10/04.	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Intrepid Oil & Gas, LLC respectively submits the attached Well History for this well to show all work commencing on 05/12/2004 to the present, 06/18/2004 associated with attempted re-entry and extended drilling of this wellbore. Due to problems encountered with changeover of mud systems and maintaining pressure and fluid loss control, it was decided to Temporarily Abandon this well and work by setting a CIBP @ 7,647' on 06/15/2004. We sheared out of plug w/40 over pull then set down on plug with 20k after shear out. We then pressure tested bridge plug to 1500 psi with 15 PPG oil based mud in wellbore - OK. Then we displaced the oil based mud from wellbore with 9.1 PPG Brine containing 0.86% Baracor 700 Corrosion Inhibitor. ND BOP's & riser, set 1 jt of 2-7/8" 5.5# EUE 8RD Tbg. w/ tbg. hanger in wellhead. Installed 7-1/16" 5M tree and tested seals to 5000 psi. TA'd well on 6/16/2004. This Temporary Abandonment was conveyed to and verbally approved by Mr. Eric Jones on Monday, June 14, 2004.

(SEE ATTACHED WELL HISTORY)

RECEIVED

DEC 0 2 2004

DIV. OF OIL, CAS & MINING

			a Mining
14. I hereby certify that the foregoing is true and correct Name (Printed/Typed)			
Alan W. Bohling (432) 498-8662	Title Regulatory	Agent - Intrepid Oil & Gas LLC	
Signature alande. Bohling	Date	06/21/2004	
THIS SPACE FOR FEDER	RAL OR STATE	OFFICE USE	
Approved by	Title	Date	
Conditions of approval, if any, are attached. Approval of this notice does not a certify that the applicant holds legal or equitable title to those rights in the subjudich would entitle the applicant to conduct operations thereon.	1		
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for	or any person knowingly	and willfully to make to any department or agency o	f the United

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

# Pure Resources, Inc. Well History

#### CANE CREEK FED #11-1(PURE/INTREPID)-100% From 1/1/1920 through 6/21/2004

	E CREEK FE	•	E/INTREPID)-1	00%			Lea	ase Well 802590-1101	
State: UT		County:							
	ite 5/13/2004		T	ype of Repoi	t: DRILLING		INITIAL	REPORT	
Desc	ription CONT	INUE RU.							
	Times	Hou	ırs	Remarks					
		12.0	00		TO LOCATION UN CTURE & SET DR			36. ASSEMBLE HEDS W/ CRANE.	
		12.0	00	SHUT DOV	VN - WAITING ON	DAYLIGHT 1	TO CONTINU	JE RIGGING UP.	
				NO. O F PI	ERSONS ON LOC	ATION 22.			
D	aily Cost	Cum Cost	AFE Amount	AFE # C	urrent Depth	Ftg Made	Mud Wt.		
	43,900	\$43,900	\$1,250,450	7040206			]		
Activity Da	te 5/14/2004		T	ype of Repo	rt: DRILLING		PROGE	RESS REPORT	
-	ription RU UI	NIT RIG #236	<b>S</b> .						
	Times	Hou	ıre	Remarks					
		12.0		CONTINUE MUD PITS		& REASSEM	BLED DERR	SET & ALIGN MUD PUMPS & ICK ON NEW LOCATION.	
		12.0	00	SHUT DO	NN. WAITING ON	I DAYLLIGHT	TO CONTIN	IUE RIG UP.	
				NO. OF PE	RSONS ON LOCA	ATION NOT F	REPORTED.		
D	aily Cost	Cum Cost	AFE Amount	AFE #	urrent Depth	Ftg Made	Mud Wt.		
1	\$11,050	\$54,950	\$1,250,450	7040206					
Activity D	ate 5/15/2004		ì	ype of Repo	rt: DRILLING		PROG	RESS REPORT	
Des	cription RUU	NIT RIG #230	5.						
	Times	Ho	urs	Remarks					
		13.	00	CONTINUE MOVING RIG EQPT ONTO LOCATION. SET DERRICK ON RIG FLOOR & JACK STAND. RE-STRUNG TRAVELING BLOCKS. RAISED & PINNED DERRICK.					
		11.	00	SHUT DO	WN - WAITING OI	N DAYLIGHT	TO CONTIN	UE RIG UP.	
				NO. OF PI	ERSONS ON LOC	ATION NOT I	REPORTED.		
	aily Cost	Cum Cost	AFE Amoun	t AFE#	Current Depth	Ftg Made	Mud Wt.		
	\$25,254	\$80,204	\$1,250,450	7040206					
Activity D	ate 5/16/2004			Type of Repo	rt: DRILLING		PROG	RESS REPORT	
Des	cription RU U	NIT RIG #23	6.						
	Times	Ho	IIFS	Remarks			•	·	
	13.00		CONTINU LINES. SI LOAD & S	ET & RU BULK BA	RITE TANKS IP RENTAL T	S. SET PREM OP DRIVE U	D CHOKE & GAS BUSTER MIX (KILL MUD) TANK. OFF INIT. HAUL & PLACE RENTA P.M.		
		11.	00	SHUT DO	WN OVERNIGHT.	WILL BEGI	N 24 HR OPE	ERATIONS THIS A.M.	
				NO. OF F	ERSONS ON LO				
l	Daily Cost	Cum Cost	AFE Amoun	t AFE#	Current Depth	Ftg Made	Mud Wt.		
;	\$12.734	\$92,938	\$1,250,450	7040206		<u>.</u> *			

Description RIH W/ CSG SCRAPER "DP.

Times	Hours	Remarks
	7.00	TEST STANDPIPE 250 PSI LOW, 5000 PSI HIGH. CHANGE OUT KILL LINE VALVE, TEST 250 PSI LOW, 5000 PSI HIGH. INSTALL NEW 4-1/16" 10K EMERGENCY VALVE ON CHOKE MANIFOLD. TEST EMERGENCY VALVE & MANUAL VALVE ON MUD CROSS CHOKE LINE TO 250 PSI LOW, 10000 PSI HIGH.
	1.50	RU TO PU DP. ATTEMPT TO SET WEAR BUSHING - WOULD NOT PASS BLIND RAMS. BLIND RAMS WOULD NOT OPEN ALL THE WAY. BLIND RAMS IN WELLBORE 1/2" ON EACH SIDE.
	6.00	CHECK KOOMEY LINES. VERIFIED CORRECT PSI ON KOOMEY. PURGED ACCUMULATOR LINE THRU OPEN SIDE. TRIED TO OPEN COMPLETELY IN THE 3000 PSI BYPASS - NO SUCCESS. SET TEST PLUG & LOCK IN.
	4.50	INSPECT RAM BONNETS W/ KNIGHT OIL TOOL. PULL DOOR OFF OF OFF- DRILLER SIDE. REBUILD DOOR REPLACEMENT SEALS. INSTALL DOOR. BLEED AIR FROM DOOR. INSTALL BLIND RAMS & FUNCTION TST - OK.
	1.00	TEST BLIND RAMS TO 250 PSI LOW, 10,000 PSI HIGH. INSTALL WEAR BUSHING.
	4.00	SAFETY MTG. PU BIT, 7" 32# CSG SCRAPER, BIT SUB & RIH PU 4" DP. DRIFTING EACH JT. DEPTH +-1400' @ 6:00 A.M.
		NO. OF PERSONS ON LOCATION 32.
D-11- C4	Our Coat AFF Amount	AEE # Current Donth

	Daily Cost	Cum Cost	AFE Amount	AFE# C	urrent Depth	Ftg Made	Mud Wt.		·	
	\$47,232	\$204,570	\$1,250,450	7040206			9.7			İ
۱ct	ivity Date 5/21/200	4	Т	ype of Repo	rt: DRILLING		PROG	RESS REPORT		

Activity Date 5/21/2004

Description RIH W/ CSG SCRAPER ASSY.

Times	Hours	Remarks
	11.50	RIH W/ CSG SCRAPER ASSY WHILE PU 4" DP TO 5930'. PERIODICALLY SHUT DOWN TO TRAIN DRILLER & RIT CREW ON USE OF TESCO TOP DRIVE SYSTEM. FILL HOLE TWICE DOWN ANNULUS W/ +- 140 BBLS OF 9.7 PPG BRINE WATER - OBSERVING ANNULAR FL DROPPING STEADILY OUT OF SIGHT AFTER PUMP SHUT DOWN. WERE ABLE TO ESTABLISH PARTIAL CIRC PUMPING BRINE DOWN DP.
	1.00	3/4" X 5" THREADED BOLT USED TO RABBIT DP. FELL FROM PICK UP MACHINE TROUGH DOWN INTO WELLBORE. RD PICK UP MACHINE & WORK PIPE FREE (BOLT HANGING UP ON DP TOOL JTS @ WEAR BUSHING).
	6.00	POH W/ CSG SCRAPER ASSY WORKING PIPE AS NEEDED WHEN BOLT HUNG UP ON WEAR BUSHING. BOLT FELL DOWNHOLE AFTER PULLING 11 STANDS. NOTED MARKS ON CSG SCRAPER GLADE - BOLT PASSRD BY.
	2.50	LAY OUT DP & STRAP. PU DP SINGLES F/ 5930-6220'.
	3.00	RUN BACK IN HOLE W/ SAME SCRAPER ASSY TO 5930'.

Daily Cost	Cum Cost	AFE Amount	AFE#	Current Depth	Ftg Made	Mud Wt.		
\$35,453	\$240,023	\$1,250,450	7040206			10.40	 	 

DRILLING

MAN HRS 436.

Type of Report:

Activity Date 5/22/2004 Type

Description RU HALLIBURTON TO P-TEST CSG.

**Times** Hours CONTINUE RIH W/ 7" CSG SCRAPER ASSY PU 4" DP TO 7660'. 2.50 CIRC & DISPLACE WELBORE W/ 9.7 PPG BRINE. SHUT DOWN PUMPS & 2.00 OBSERVE FL IN ANNULUS DROPPING 10' IN 5 MIN. SWI & BULLHEAD 20 BBLS BRINE OUT CSG SHOE. PRESSURES STEADILY INCREASING TO 1720 PSI @ 1.5 BPM (STILL SLOWLY INCREASING). ISIP 1600 PSI, 1/1500, 20/710 PSI. STRAP OUT OF HOLE, LD CSG SCRAPER. 4.00 TIH W/ 6" BIT, FLOAT SUB ON 4" DP. TAG OBSTRUCTION @ 7708'. 5.50 CIRC BOTTOMS UP TWICE. 1.00 POH TO RUN RTTS PKR. 4.00 MU RTTS PKR. RIH ON DP TO 7655'. 3.50 CIRC BOTTOMS UP @ 7655'. RU HALLIBURTON TO ANNULUS. 1.00 SAFETY MTG W/ RIG CREWS & HALLIBURTON. SET PKR @ 7655'. TEST LINES 0.50 TO 5000 PSI.

Daily Cost	Cum Cost	AFE Amount	AFE#	Current Depth	Ftg Made	Mud Wt.	i
\$40,304	\$280,327	\$1,250,450	7040206	7702	7702	9.70	

MAN HRS 296.

PROGRESS REPORT

AFE # Current Depth

7702

7040206

Ftg Made

Mud Wt.

10

**AFE Amount** 

\$1,250,450

**Daily Cost** 

\$50,737

**Cum Cost** 

\$437,145

**PROGRESS REPORT** Activity Date 5/26/2004 Type of Report: DRILLING Description BULLHEADING LCM. **Times** Hours Remarks CONTINUE BULLHEADING & SQUEEZING 10 PPG LCM LADEN MUD INTO 6" 24.00 LATERAL OH SECTION. BULLHEADING 30 BBLS @ 1.5 BPM EVERY 2 HRS. PUMP IN PRESSURES STEADILY INCREASING F/ 1520 PSI TO 2230 PSI. SIP 2 HRS AFTER PUMPING INCREASING F/ 170-1500 PSI. HAVE PLACED 540 BBLS LCM MUD INTO LATERAL ZONE SINCE STARTING HESITATION SQUEEZE PROCEDURE. MAN HRS 308 AFE # Current Depth Ftg Made Mud Wt. **Daily Cost Cum Cost AFE Amount** 10.0 \$483.965 \$1,250,450 7040206 7702 \$46,820 PROGRESS REPORT **DRILLING** Activity Date 5/27/2004 Type of Report: Description RIG REPAIR - OVERRIDING CLUTCH DRAWWORKS. Remarks Times Hours CONTINUE BULLHEADING & SQUEEZING LCM LADEN MATERIAL INTO 6" 8.50 LATERAL HOLE. BULLHEADING 30 BBLS @ 1.5 BPM EVERY 2 HRS. PP STEADILY INCREASING F/ 1500 PSI TO 2420 PSI. HAVE PUMPED 650 TOTAL BBLS INTO LATERAL ZONE SINCE START OF THE OPERATION. BLEED OFF PRESSURE F/ DP & CSG THRU CHOKE SLOWLY. OPEN RAMS & 1.50 DISPLACE DP W/ 10# BRINE. REPAIR OVERRIDING CLUTCH ON DRAWWORKS. MONITOR WELL ON TRIP 11.50 TANK, STATIC. 2.50 POH TO 3820. OVERRIDING CLUTCH WENT OUT ON THE HYDROMATIC DRAWWORKS BRAKE - NOT ABLE TO CONTINUE W/ TOH. SECURE WELL. MAN HRS 288 Mud Wt. **Daily Cost Cum Cost AFE Amount** AFE # Current Depth Ftg Made \$526,093 \$1,250,450 7040206 7702 12.0 \$42,128 **PROGRESS REPORT** Activity Date 5/28/2004 Type of Report: DRILLING Description CLEAN OUT HOLE. Remarks Times Hours REPAIR WATER SPEAR ON DRAWWORKS. 5.50 2.00 TOH F/ 3820' TO SURFACE. SERVICE TOP DRIVE & RIG. ADJUST BRAKES. 1.00 MAKE UP BIT, BIT SUB & FLOAT. RIH TO 7649'. 4.00 DISPLACE 10 PPG BRINE W/ 12 PPG MUD W/ 10 WATER LOSS, 30% LCM @ 9.50 7649'. BUILD SURFACE VOLUME TO 690 BBLS. WASH & REAM F/ 7702-8207' - NO LOSSES OBSERVED. 2.00 MAN HRS 308 Mud Wt. AFE # | Current Depth Ftg Made **Daily Cost Cum Cost AFE Amount** 9500 12.0 \$580.551 \$1,250,450 7040206 \$54,458 **PROGRESS REPORT** Type of Report: DRILLING Activity Date 5/29/2004 Description SQUEEZING LCM INTO FORMATION TO ACHIEVE 16 EMW. Remarks **Times** Hours CLEAN OUT F/ 8207-9500'. LOST 10 BBLS MUD F/ 9481-9500'. 3.50 CIRC COND MUD @ 9500, MUD WT 12.2, 35% LCM, 9.6 WATER LOSS. 11.00 POH W/ 9500-7650'. POH - NO PUMPING OR BACK REAMING. 1.50 CIRC FOR FIT. 1.00 PERFORM FIT. ATTEMPT TO PRESSURE UP TO 1500 PSI. REACHED 1340 PSI 7.00 BEFORE INJECTING INTO FORMATION 15.6 EMW, 10 SEC BLEED OFF, 1100 PSI, 15.0 EMW. CONTINUE PRESSURING UP ON FORMATION TO ACHIEVE A 16 PPG **EMW PRESS RATES AS FOLLOWS:** 23:30 INITIAL 0-1340 PSI 10 SEC 1100 8.1 BBLS 10 SEC 1320 4.5 BBLS 00:30 0-1500 0 - 149010 SEC 1300 4.7 BBLS 02:30 0 DP 140 CSG 1500 10 SEC 1310 4.2 BBLS 03:30 120 DP 250 CSG 1520 10 SEC 1340 3.75 BBLS 04:30 470 DP 596 CSG 1520 10 SEC 1330 2.7 BBLS 05:30 MAN HRS 288 Mud Wt. AFE # | Current Depth Ftg Made **Daily Cost Cum Cost AFE Amount** 12.10 7040206 9500 \$43,779 \$624,330 \$1,250,450

	Activit	y Date 5/30/2004		Tvp	e of Repo	rt: DRILLING		PROGRE	SS REPORT
		Description CIRC-8	COND MUD.		•	OND MUD & HOLE.			
		Times	Hours		Remarks				
			12.00	;	SCHEDUL	E:			2 PPG MUD FOLLOWING
				(	07:30 DP 0 CSG		2.90 BBL, 1400	DP, 1510 (	CSG, 10 SEC 1250 DP, 1320
				(	08:30 DP 0 09:30 DP 0 1400	), CSG 72, PUMP 3. ), CSG 100, PUMP :	.3 BBL, DP 120 3.1 BBL, DP 13	00, CSG 150 390, CSG 15	01, 10 SEC 1380 505, 10 SEC DP 1190, CSG
					10:30 DP 1 1390				1508, 10 SEC DP 1210-CSG
					1340	130, CSG 570, PUM 140, CSG 570, PUM			1510, 10 SEC DP 1190-CSG
					13:30 DP 4 CSG 1410	140, CSG 692, PUM	IP 1.5 BBL, DP	1430, CSG	1530, 10 SEC DP 1250,
					<b>CSG 1398</b>				1530, 10 SEC DP 1240,
					1400				1544, 10 SEC DP 1250, CSG
					16:30 DP CSG 1390		IP 1.1 BBL, DP	1420, CSG	3 1390, 10 SEC DP 1230,
					17:30 DP	760, CSG 895			170.05001
			1:00			FF.PRESSURE SLO			), WL TO <10 LCM 30%.
			11.00	•	MAN HRS		. KAISE WIOD	<b>VV</b> 1 10 14.0	7, VVE 10 - 10 EON 00%.
	Г	Daily Cost	Cum Cost	AFE Amount		Current Depth	Ftg Made	Mud Wt.	
		\$37,518	\$661,848	\$1,250,450	7040206	9500		13	
-	Activ	ity Date 5/31/2004		Ту	pe of Rep	ort: DRILLING		PROGR	ESS REPORT
		Description CIRC	& COND MUD	).					•
		Times	Hour		Remarks		DAISE MID	WL E/ 13 D	PG TO 14 PPG. LOWER
			24.00	)		.OSS F/ 18-11.	. KAISL MOD		1 0 10 1411 0. 20WER
	ſ	Daily Cost	Cum Cost	AFE Amount	11	Current Depth	Ftg Made	Mud Wt.	
	į_	\$33,766	\$695,614	\$1,250,450	7040206	9500	, , , , , , , , , , , , , , , , , , , ,	14	
•	Activ	ity Date 6/1/2004		• •	pe of Rep	ort: DRILLING		PROGR	RESS REPORT
		Description CIRC	2 & COND MUI	0.					
		Times	Hou		Remarks	OND MUD. INCRE	ASE WT F/ 14	PPG TO 1	â PPG
			16.0 2.00		DRILLER	NOTICED MUD O	VER TOP OF S	TACK. CH	ECKED ROTATING HEAD
		·	2.00		RUBBER	BOTTOM PART (	OF RUBBER B	ROKE LOO	SE FROM SEAT IN CLAMP. TATING RUBBER. NO
					SUCCES	S. RUBBER WEDO	SED INTO BOI	P'S. RIH TO	9500'. INSTALL NEW
			4.00			NG RUBBER.	ALID DAISING	NAT E/ 15	8 PPG TO 16 PPG @ 9500'.
			4.00		MAN HR		NOD. KAISING	, , , , , , , , , , , , , , , , , , , ,	
	Γ	Daily Cost	Cum Cost	AFE Amount		Current Depth	Ftg Made	Mud Wt.	
		\$46,746	\$742,360	\$1,250,450	7040206	9500		16	
	Activ	vity Date 6/2/2004		T	ype of Rep	ort: DRILLING		PROGI	RESS REPORT
		Description CIR	C & COND MU	D.					
		Times	Hou		Remark				2 05001
			4.00			COND MUD TO 16 I TROUGHS IN THE I			
			1.00 2.00			SHOE - NO PROB		AVOID 01 11	LEING MOD.
			0.50		RIG SEF				
			1.00			700-9500'. INSTAL	L NEW ROTAT	TING RUBB	ER.
			13.0	00		COND MUD TO 16	PPG, 28% LCN	/I, 12.5 PH.	
	F			AFE A	MAN HE		Eta Mada	Mud Wt.	
	1	Daily Cost \$38,248	Cum Cost \$780,608	AFE Amount \$1,250,450	7040206	Current Depth 9500	Ftg Made	16.0	
	Ĺ	Ψ00, <b>ε4</b> 0	Ψ, 00,000	¥ ,,200,400	. 5 15255				

Acti	vity Date 6/3/2004		Ту	pe of Repo	rt: DRILLING		PROGR	ESS REPORT
	Description TES	TING BOP'S.						
	Times	Hou	rs	Remarks				
		4.00			OND MUD. WATE FERIA. SMOOTH		DUE TO BA	CTERIA. RAISED PH TO
		3.00		WIPE HO	E F/ 9500-7702'.			
		3.50		CIRC & C	OND MUD, 16.0 PF	PG, 60 VIS <10	WL.	
		6.50		SLUG PIP	E. POH F/ 9500' T	O SURFACE.		
		1.00		JET CELL	AR, PULL WEAR E	BUSHING.		
		0.50		CHANGE	OUT CORROSION	RING IN SAV	ER SUB ON	TOP DRIVE.
		5.50		10000 HIC	6H; ANNULAR PRE & CHOKE MANIFOO 0 HIGH.	VENTER 250	LOW, 3500	DRIVE VALVES 250 LOW, HIGH; RAMS, MUD CROSS, 2000 HIGH; MUD LINE 250
ſ	Daily Cost	Cum Cost	AFE Amount		Current Depth	Ftg Made	Mud Wt.	
	\$39,434	\$820,042		7040206	9500	i ty made	14.80	
i	<del></del>	4020,042						
Acti	vity Date 6/4/2004		-	pe of Repo			PROGR	ESS REPORT
	Description TES	ST BOPE, CON	D MUD, MU KIC	KOFF ASS	iY & HH.	• • • • • • • • • • • • • • • • • • • •		
	Times	Ḥou	rs	Remarks				
		4.50	)	TEST BO	P'\$.			
		2.50	)	COND SU	RFACE VOLUME.			
		3.00	) •	MAKE UP	MOTOR & MWD.	TEST SAME,	CONTINUE	MU BHA.
		2.00	)	RIH W/ B	HA ON 44 STANDS	OF DP TO 41	86'.	
		1.00	)	CIRC ST	RING VOLUME.			
		7.00	)	PU 54 JT	S OF HWDP, BREA	AK IN NEW CO	NNECTION	S. RIH TO 7712'.
		2.00	)	RIH F/ 77	12-9391'. WASH T	HRU SPOT @	7900'. BRE	AK CIRC @ 8800'-& 9193'.
		0.50	)			391-9320'. WI	HILE CALIB	RATING MWD/LWD, PIPE
		0.50	, )	125/130K	TUCK PIPE @ 932 DOWN. WORK P INTO PIPE W/ TO	IPE GRADUAL	LY TO 250h	ACK OFF WEIGHTS 160 UP, CUP & 100K DOWN. WORK DO SPM W/ 2500 PSI.
	Deily Cost	Cum Cost	AFE Amount		Current Depth	Ftg Made	Mud Wt.	
	Daily Cost	\$880,735	\$1,250,450	7040206	9500	rty made	15.80	
	\$60,693							
Act	ivity Date 6/5/2004		T	ype of Rep	ort: DRILLING		PROGE	RESS REPORT
	Description CLI							
	Times	Hou		Remarks				
		8.00			_			F WEIGHT FREE PIPE.
		8.50	<b>)</b> .		320' TO SURFACE OP DRIVE SAVER		ONAL TOO	LS & PULL CORROSION RING
		7.50	n				E EOR OIL I	BASE MUD CHANGE.
		7.5	•	MAN HR		AN. TILLIAN	L I OK OIL	BAGE MOD ON ANOL.
	Daily Card	Cum Cost	AFE Amount		Current Depth	The Made	Mud Wt.	
	Daily Cost \$59,554	\$940,289	\$1,250,450	7040206	9500	Ftg Made	16.0	
Act	ivity Date 6/6/2004	. ,		ype of Rep	ort: DRILLING		PROG	RESS REPORT
	Description CO	ND OIL BASE	MUD.	•				
	Times	Ho	urs	Remarks	:			
		24.	00	HALII OF	E SALT BASE MIL	D CLEAN PIT	MI ILIAM 2	A COMP OF BACK MID
		24.	00	I IAOL OI	I OALI DAGE MIC	D. OLL,	S, I IAUL IIV	& COND OIL BASE MUD.
		24.	00	MAN HR		D. OLC/	S, HAUL IIV	& COND OIL BASE MOD.
	Daily Cost	Cum Cost	AFE Amount	MAN HR		Ftg Made	Mud Wt.	& COND OIL BASE MOD.

Açtiv	rity Date 6/7/2004		т	ype of Report	DRILLING		PROGR	ESS REPORT
•	Description COI	ND OIL BASE						
	Times	Hou	rs	Remarks			_	
		12.0	0	HAUL IN & C	OND OIL BASE	E MUD TO 12.0	PPG, 4 PPE	3 FL-2000.
•		4.50		MU BIT & RI	H TO SHOE.			
		1.59		COND SUR	FACE MUD 12 F	PPG, 4 PPB LC	P.	
		1.50		DISPLACE V	N/ OIL BASE M	UD @ 7626'.		
		4.50					0 BBLS SU	RFACE VOLUME 12 PPG, 4
				PPB LCP.				
				MAN HRS 4				
i	Daily Cost	Cum Cost	AFE Amount	11	rrent Depth	Ftg Made	Mud Wt.	
Ĺ	\$55,218	\$1,061,092	\$1,250,450	7040206	9500		12.0	
Activ	vity Date 6/8/2004	ļ	T	ype of Report	: DRILLING		PROGR	ESS REPORT
	Description TIH	I INTO OH.						
	Times	Hou	rs	Remarks				
		1.00	1	CIRC & CO	ND MUD @ SHO	DE.		
		1.25		TIH TO 9500	_			
		7.00	,	DISPLACE	OH TO OIL BAS	E MUD. CONE	HOLE & M	UD, 12.0 PPG - NO LOSSES.
	:	5.75	; · · ·	POH TO PU	DIRECTIONAL	TOOLS.		
•		7.00	)	PU MOTOR	& MWD. TEST	TSAME. MUB	IT & REST (	OF BHA. TIH TO 7714'.
		0.50	•	FILL STRING	G @ 7714'. RE	CORD PARAMI	ETERS, CAL	LIBRATE HEIGHT ON MWD
		1.50	)	CONTINUE	RIH F/ 7714-94	00'.		
				MAN HRS 4	06.			
ſ	Daily Cost	Cum Cost	AFE Amount	AFE # Cu	rrent Depth	Ftg Made	Mud Wt.	
	\$78,576	\$1,139,668	\$1,250,450	7040206	9500		12.0	
Acti	vity Date 6/9/2004	4	Т	ype of Repor	DRILLING	;	PROGR	RESS REPORT
	Description TIM		N HOLE SIDE	TRACK.				
	Times	Ноц	ırs	Remarks				
		1.00	),	GET TOOL	FACE & CUT TR	Rough.		
		23.0	00	TIME DRLG	F/ 9400-9425' (	<del></del>		
	Daily Cost	Cum Cost	AFE Amount	11	urrent Depth	Ftg Made	Mud Wt.	
į	\$51,726	\$1,191,394	\$1,250,450	7040206	9500		12.10	
Acti	ivity Date 6/10/20	04	1	ype of Repor	t: DRILLING	•	PROGI	RESS REPORT
	Description RC	TARY DRILL 6'	'HOLE.					
•	Times	Hot	urs ·	Remarks				
		6.29	5 .	TIME DRLG	F/ 9425-9438'	@ 2 FPH.		
	•	3.29	5	TIME DRLG	F/ 9438-9454'	@ 5 FPH.		
						F4L AVO 500	OF LINUTO	
		14.	50	ROTARY D	RLG F/ 9454-95	54'. AVG BGG	25 UNITS,	MAX CONN GAS 103 UNITS.
	,		50	ROTARY D MAN HRS		54'. AVG BGG	25 UNITS,	MAX CONN GAS 103 UNITS.
[	Daily Cost		AFE Amoun	MAN HRS		Ftg Made	Mud Wt.	MAX CONN GAS 103 UNITS.

-	Southann Lan		•
	Times	Hours	Remarks
		2.00	ROTATE & DRLG 6" LATERAL HOLE SECTION F/ 9554-9575'.
		5.00	SLIDE DRLG F/ 9575-9603'.
		5.00	ROTATE & DRLG F/ 9603-9643'. INCREASED MUD WT TO 12.7 PPG WHILE DRLG.
		1.00	SHORT TRIP. PUMPING OUT F/ 9643-9330' & BACK TO 9643'.
		0.50	CIRC BOTTOMS UP @ 9643'. TOTAL GAS UNITS 51.
		2.50	PUMP OUT OF HOLE F/ 9643-7700'.
		0.50	FLOW CHECK & SLUG PIPE.
		5.50	POH F/ 7700' TO BHA.
		2.00	FLUSH MOTOR. BREAK OFF BIT. LD DIRECTIONAL TOOLS.
			MAN HRS 400.
			MD INC DRIFT VS TVD
			9387 94.11 128.61 1966.01 7555.71
			9400 93.39 127.76 1978.98 7554.86
			9416 92.07 127.67 1994.96 7554.10
	•		9446 90.40 125.21 2024.95 7553.45
			9482 90.13 125.30 2060.92 7553.28
			9513 90.13 124.60 2091.90 7553.21
			9544 90.22 124.69 2122.86 7553.12
	Daily Cost	Cum Cost AFE Amoun	t AFE# Current Depth Ftg Made Mud Wt.
	\$62,319	\$1,294,948 \$1,250,450	7040206 9643 89 12.70

Activity Date 6/12/2004

Type of Report: DRILLING

PROGRESS REPORT

Description BLDG SURFACE VOLUME, MONITOR WELL ON TRIP TANK.

	Times	Hou	rs	Remarks
		5.00	r .	PU & RIH W/ 6" BIT, FLOAT SUB ON 4" DP & HWDP TO 7700'.
		4.00	1	WEIGHT UP MUD IN PITS F/ 12.7 TO 14.0 PPG. CHANGE OUT RIG TRAVELING BLOCK. HANG OFF CABLE TO ENABLE RIG TO SLIP & CUT DRLG LINE AFTER TOP DRIVE SYSTEM INSTALLATION.
		2.00	t	SLIP & CUT DRLG LINE. ADJUST BRAKES. SERVICE RIG.
		2.00	)	CIRC & DISPLACE HOLE TO 7700' W/ 14.0 PPG MUD @ 2.5 BPM. AFTER DISPLACEMENT OBSERVEDMUD LOSSES @ +-10%. LOST 45 BBLS MUD TO HOLE.
		1.50	)	MIX & SPOT 14 BBL LCM PILL ACROSS BIT @ 7700'. LOST 32 BBLS MUD TO HOLE WJILE SPOTTING PILL.
		2.50		OBSERVE WELL TAKING FLUID @ 6 BPH (11 BBLS LCM INTO FORMATION). BULLHEAD 25 BBLS 20 PPB LCM INTO OPEN HOLE, 2.2 BPM @ 540 PSI. ISIP 310, 1/280, 10/50 PSI.
		2.00		SPOT 57 BBL LCM PILL. LOST 21 BBLS WHILE SPOTTING PILL. SWI & BULLHEAD 57 BBLS 30 PPB LCM INTO OPEN HOLE, 2 BPM @ 770 PSI. ISIP 550, 10 SEC/545, 10 MIN 390 PSI.
		5.00	)	OBSERVE ANNULUS PRESSURE DROPPING F/ 550 PSI INITIAL TO 50 PSI IN 1.5 HRS. MONITOR WELL ON TRIP TANK,W/ HOLE, TAKING MUD @ 1 BPH. BUILT SURFACE VOLUME WHILE MONITORING WELL. TOTAL MUD LOSSES TO OH 21 BBLS.
	D-11- O4	C Ct	AFE A	MAN HRS 400. t AFE # Current Depth Ftg Made Mud Wt.
	Daily Cost	Cum Cost	AFE Amount	· · · · · · · · · · · · · · · · · · ·
1	\$15,000	\$1,309,948	\$1,250,450	7040206 9643 9634 14.10

	MAN HRS 384.								
	Daily Cost	Cum Cost	AFE Amount	AFE#	Current Depth	Ftg Made	Mud Wt.		
Ĺ	\$69,509	\$1,437,259	\$1,250,450	7040206	9643		15.0		

PSI 554. ISIP 341, 1/219 PSI. BLED TO 0 IN 20 MIN. #4 MAX PSI 548. ISIP 291, 1/214 PSI, BLED TO 0 IN 10 MIN. #5 BULLHEADED 10 BBLS. MAX PSI 570. ISIP 319, 1/244, BLED TO 0 IN 25 MIN. TOTAL MUD LOSSES 24 HRS = 281 BBLS.

Activity Date 6/15/2004			e of Repo			PROGR	ESS REPORT
Description DISI	PLACE OIL BASE	W_PPG II	NHIBITED	BRINE.	,		
Times .	Hours 2.00		Remarks BULLHEAU STAGES.	O 16 BBLS LCM MU	D INTO OH U	SING HESI	TATION METHOD IN 1 BBL
	0.50			.L @ 2.5 BPM. LOS	ING 25 BBLS	MUD TO F	ORMATION @ +-1 BPM
	4.50		MONITOR BPH RATE		NK. LOSING	25 BBLS M	UD TO FORMATION @ +-5
	5.00		PUMP SLU	JG. POH & LD BIT.			
	1.50			PIP[E GRABBER DI			
	5.50		CIRC @ 25	500, 5000 & 7600'. 1	LOST 50 BBL	S MUD ON	
	0.50		ON PLUG	AFTER SHEAR OU	T - OK.	11 W/ 40 OV	ER PULL. SET 20K DOWN
	0.50 4.00		CIRC & SH DISPLACE	E 7" CSG W/ 9.1 PP	F MUD OVE		S. PREPARING TO TER.
			MAN HRS				
Daily Cost		FE Amount	AFE # 0	Current Depth 9643	Ftg Made	Mud Wt. 14.0	
					•		FOO DEPONT
Activity Date 6/16/200		Ty	pe of Repo	ort: DRILLING		PROGR	ESS REPORT
Description ND			Damada				
Times	Hours 1.00		Remarks	HAKE OUT LCM OV	ED CHAKED	e	
	2.50						9.1 PPG BRINE CONTAINING
	2.50			RACOR 700 CORRO			
	5.50		POH LD 2	46 JTS OF 4" DP.			
	2.00			STANDS 4" DP & 1		" HWDP.	
	3.50			66 JTS			
	8.50			NC. @ REPORT TIM		FLOWLINE	E, CHOKE & KILL LINES. ND
Daily Cost	Cum Cost A	FE Amount		Current Depth	Ftg Made	Mud Wt.	
\$9,706			7040206	9643		14.0	
Activity Date 6/17/200	)4	Tv	pe of Rep	ort: DRILLING		PROGR	RESS REPORT
Description RIC		•	•				
Times	Hours	<b>;</b>	Remarks				
	1.50		ND BOP'S	S & RISER.			
	1.50			OF 2-7/8" 5.5# EUE & TEST SEALS TO			GER IN WH. INTALL 7-1/16"
	13.00		MUD TO		IUNCTION - F		FF REMAINING OIL BASE T. BACK LOAD & SHIP MISC
	8.00		LOAD RE	MAINING BULK MU			LEARED RIG FLOOR. BACK IS.
D-11- O- 1	Cum Cost	AFE Amount	MAN HR	S 452. Current Depth	Ftg Made	Mud Wt.	
Daily Cost \$28,933		\$1,250,450.	7040206	9643	i ty maue	muu TFL	
Activity Date 6/18/20			ype of Rep	ort: DRILLING		FINAL	REPORT
Description RE		•	, po or 1.0p				
Times	<b>Hours</b> 15.00		SWACO	JE CLEANING MUD GAS BUSTER BRA MATERIAL. RELEA	NDT SOLIDS	CONTROL	DOWN & BACK LOADING EQPT & REMAINING MUD 7/04.
Daily Cost	Cum Cost	AFE Amount		Current Depth	Ftg Made	Mud Wt.	
(\$11,432)	\$1,519,412	\$1,250,450	7040206	9643			

#### TUBING BREAKDOWN AS OF ROD BREAKDOWN AS OF FAILURES AS OF

		DEPARTMEN"		L RESOUR				(highligi	ED REPOR	)	FORM 8
	1	DIVISION O	FOIL, GAS	AND MII	NING				designation -65972 (		RIAL NUMBER:
WEL	L COMPLET	TION OR F	RECOMPL	ETION	REPO	RT ANI	DLOG	6. IF INDIA	N, ALLOTTEE	OR TRIBI	E NAME
1a. TYPE OF WELL			GAS D	DRY		HER		7. UNIT or	CA AGREEME		
b. TYPE OF WOR				3	•	<u>e : </u>			e Creek		
WEYL	HORIZ. D	EEP-	NTRY 🗹	DIFF. RESVR.	ОТ	er Wel	I TA'd.	11-1		DEN.	
2. NAME OF OPER Intrepid O	ator: il & Gas, LLC							9. API NUI 430	MBER: 1931364		
3. ADDRESS OF O					00000		NUMBER:	10 FIELD A	ND POOL, OF	WILDCA	т
4. LOCATION OF V		Denver	STATE	CO ZIF	00202	(30	03) 296-3006	Wild		TOWNSH	IIP RANGE
	2220' FNL & 2	:060' FWL	e de estado de la como de estado de esta Estado de estado de e	ا داد کا در داد این این استانید			ي .		TR, SECTION HAN: / 11	26S 1	
AT TOP PRODU	ICING INTERVAL REPO	RTED BELOW:	IA-Well Ten	porarily	Abandon	<b>d</b>		SLIV	, 11	200 1	9E
AT TOTAL DEP	тн: 3766' FNL	& 3989' FWL	Original E	3H Loc.	K.B			12. COUN Gran		13	STATE UTAH
14. DATE SPUDDE 5/23/2002	D: 15. DATE 1	r.d. reached: 2002	16. DATE COMPL 6/15/2004	.етео: Те <b>4</b>	emporar ABANDO		READY TO PRODU		LEVATIONS ( 6,147' G		RT, GL):
18. TOTAL DEPTH:	9,000	19. PLUG	BACK T.D.: MD			MULTIPLE C	OMPLETIONS, HOW	MANY? * 21. D	EPTH BRIDGI PLUG SET:		7,647
22. TYPE ELECTRI	TVD 7.554	NICAL LOGS RUN (		7,647	<u></u>	23.		1	<del></del>	TVD	7,647
None-Well r	re-entry unsuco rarily abandone	essful due to	o drlg. fluid l	·		WAS WEI WAS DST	L CORED? RUN? ONAL SURVEY?	NO <b>√</b> О ОИ	YES   YES   YES		t analysis) t report) t copy)
24. CASING AND L	INER RECORD (Report	all strings set in w	oll)								
HOLE SIZE	SIZE/GRADE	WEIGHT (#/ft.)	TOP (MD)	воттом (		CEMENTER EPTH	CEMENT TYPE & NO. OF SACKS	SLURRY VOLUME (BBL	CEMENT	TOP **	AMOUNT PULLED
13-3/8"	K-55	54.5	0	749			566	193	С	IR	0
9-5/8"	N-80	40.0	0	4,30			878	278	CI		0
7"	J-55	32.0	0	7,70	2		846	155	4,300	)' TS	0
								<u> </u>			
			<del>.</del>	-				<u> </u>			
25. TUBING RECO	RD			<u>.                                    </u>	L			1			L
SIZE	DEPTH SET (MD)	PACKER SET (	MD) SIZE	<b>=</b>   C	EPTH SET (MC	) PACKE	R SET (MD)	SIZE	DEPTH SET	(MD)	PACKER SET (MD)
NA-Well TA'	d										
26. PRODUCING IN	ITERVALS					27. PERFO	RATION RECORD				
FORMATION		(MD) BOTTO	M (MD) TOP	(TVD) B	OTTOM (TVD)		AL (Top/Bot - MD)	SIZE NO. H	IOLES	PERFORA	TION STATUS
(A) NA-Well	TA'd					and State of the	v si yomenna o si ya Jay		Open	<u> </u>	Squeezed
(8)									Open	<u> </u>	Squeezed
(C)						A SA			Open	<u> </u>	Squeezed
(D)						4 11 4 20 124			Open		Squeezed
	RE, TREATMENT, CEMI	ENT SQUEEZE, ETC	j.			OUNT AND I	TYPE OF MATERIAL	·	* 8 3444	·UE	IVED_
	HALEKANE		<u> </u>	<del></del>		- CONTAND	TPE OF MATERIAL		- DE	<del>C 1 4</del>	2004
<del></del>									DIV OF O	U 040	
									··· o, o,	L, GAS	& MINING
29. ENCLOSED AT	TACHMENTS:								<u></u>	30. WELL	STATUS:
=	RICAL/MECHANICAL LO		VERIFICATION	=	OLOGIC REPOI RE ANALYSIS		DST REPORT COTHER: BLM S	DIRECTIONA undry	L SURVEY		TA'd

(CONTINUED ON BACK)

(5/2000)

31. INITIAL PRO	ODUCTION			INTI	ERVAL A (As sho	wn in item #26)				
DATE FIRST PR	ODUCED:	TEST DATE:		HOURS TESTED	<b>)</b> :	TEST PRODUCTION RATES: →	OIL - BBL:	GAS - MCF:	WATER - BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL BBL:	GAS - MCF:	WATER - BBL:	INTERVAL STATUS:
				INT	ERVAL B (As sho	wn in item #26)				
DATE FIRST PR	ODUCED:	TEST DATE:		HOURS TESTED	):	TEST PRODUCTION RATES: →	OIL – BBL:	GAS MCF:	WATER - BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU - GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL BBL:	GAS MCF:	WATER - BBL:	INTERVAL STATUS:
				INT	ERVAL C (As sho	wn in item #26)				
DATE FIRST PR	RODUCED:	TEST DATE:		HOURS TESTED	):	TEST PRODUCTION RATES: →	OIL BBL:	GAS MCF:	WATER - BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS MCF:	WATER - 88L:	INTERVAL STATUS:
				INT	ERVAL D (As sho	wn in item #26)				
DATE FIRST PR	RODUCED:	TEST DATE:		HOURS TESTED	<b>)</b> :	TEST PRODUCTION RATES: →	OIL - BBL:	GAS - MCF:	WATER - BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU - GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS MCF:	WATER - BBL:	INTERVAL STATUS:
32. DISPOSITIO	ON OF GAS (Sold	, Used for Fuel,	Vented, Etc.)							
33. SUMMARY	OF POROUS ZOI	NES (include Aq	uifers):			3	4. FORMATION	(Log) MARKERS:		
			hereof: Cored inter- nut-in pressures and	vals and all drill-stem d recoveries.	n tests, including de	epth interval				
Formati	on	Top (MD)	Bottom (MD)	Descrip	tions, Contents, etc	<b>.</b>		Name		Top (Measured Depth)
35. ADDITIONA	AL REMARKS (Inc	a pripopula <b>s</b> bulc	procedure)							
				uld not main	tain circ. of	drlg. fluids. W	ell TA'd w	/CIBP@7,64	7' on 6/15/2	0004.
36. I hereby ce	rtify that the fore	going and attac	hed information is	complete and corre	ect as determined	from all available rec	ords.			
NAME (PLEAS	SE PRINT) Ala	n W. Bohli	ng 4	1 11 11		TITLE Regu	ulatory Ag	ent		
SIGNATURE	Alan	W.Bor	ling			12/1	0/2004			
This report n	nust be submi	tted within 30	days of	_	roonto-i	proviousky pluggo	d and above	anad well		

- completing or plugging a new well
   drilling horizontal laterals from an existing well bore
   recompleting to a different producing formation

- reentering a previously plugged and abandoned well
   significantly deepening an existing well bore below the previous bottom-hole depth
   drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests
- \* ITEM 20: Show the number of completions if production is measured separately from two or more formations.
- \*\*ITEM 24: Cement Top Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to: Utah Division of Oil, Gas and Mining

1594 West North Temple, Suite 1210

Box 145801

Salt Lake City, Utah 84114-5801

Phone: 801-538-5340

801-359-3940 Fax:



The Intrepid Companies 700 17th Street, Suite 1700 Denver, CO 80202 303.296.3006 303.298.7502 fax

December 20, 2004

Mr. Dustin Doucet State of Utah Department of Natural Resources Division of Oil, Gas and Mining 1594 W. North Temple, Suite 1210 PO Box 145801 Salt Lake City, UT 84114-5801

PECEIVED

DEC 2 3 2004

DIV. OF U.L., CAS & MINING

Dear Mr. Doucet,

Attached are copies of Abandonment Procedures for 3 of our wells in the Cane Creek Unit. Please return an approved copy in the self addressed stamped envelope upon your approval.

Sincerely,

Richard Miller

Special Projects Manager

**UNITED STATES** 

	Expires March 31, 2007 5. Lease Serial No.					
	UTU-65972					
Do	6. If Indian ,Allottee or Tribe Name					
***************************************	ndoned well. Use	POFM 3160-3 (AP	D) for such prop	oosais		N/A
1. Type of Well						7. If Unit or CA/Agreement, Name and/or #
OILWELL [X] GAS WELL []	OTHER					Cane Creek Federal
2. Name of Operator	Intrepid Oil and	Gas LLC				8. Well Name and No.
						11-1
3a. Address	700 17th Street,	Suite 1700		3b. Phone No. (includ	de area code)	9. API Well Number
	Denver CO 80202	2		303-298-1951		43-019-31364-00
4. Location of Well (Footage, Sec., T., R., N	1., or Survey Description	,				10. Field & Pool, or Exploratory Area
2220' FNL & 200	60' FWL	Projected Botto	m Hole Location	(estimated)		Wildcat
SENW, Sec. 11,	T-26-S, R-19-E	4473' FNL & 5,02	22' FWL; Sec. 11	, T-26-S, R-19-E		11. County or Parish, State
						Grand County, UT
12. CHE	CK APPROPRIAT	E BOX(ES) TO IN	IDICATE NATURI	OF NOTICE, R	EPORT, OR OTH	ER DATA
TYPE OF SUBMISSION	TYPE OF ACTION				·	
	[ ] Acidize	[]Deepen	[ ] Production (Start/	Resume)	[ ] Water Shut-Off	
[ ] Notice of Intent	[ ] Alter Casing	[] Fracture Treat	[] Reclamation		[ ] Well Integrity	
[ ] Subsequent Report	[] Casing Repair	[ ] New Construction	[ ] Recomplete		[]Other	
[x] Final Abandonment Notice	[ ] Change Plans	[ ] Plug and Abandon	[x] Temporarily Aba	ndon		
	[ ] Convert to Injection	[ ] Plug Back	[ ] Water Disposal			

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. ifthe Proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. onfile with the BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Request permission to Abandon the above well per the attached procedure

RECEIVED DEC 2 3 2004

FORM APPROVED OM B No. 1004-0137

DIV. OF OIL, GAS & MINING

COPYS	ENT TO OPERATOR	
Cale:	12-29-04	2
	CHO	
		į

The same and the state of the same of the same of			
14. I hereby certify that the foregoing is true and correct  Name (Printed/Typed) Richard Miller	Title	Spec Proi.	Mor
Signature Februard Milley	Date	12/20/04	
THIS SPACE FOR FEDERAL OR STATE OFFICE USE			
Approved By:	Title	Accepted by the	1 Of This
		Utah Division of	Federal Approval Of This
Conditions of approval, if any, are attached. Approval of this notice does not warrant or	Office	Oil, Gas and Mining	Action is Necessary
certify that the applicant holds legal or equitable title to those rights in the subject lease	Date	· 17(78/04	
which would entitle the applicant to conduct operations thereon.			
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person and highly and will use make to any department or agency of the United States any false, fictitous			
or fraudulent statements or representations as to any matter within its jurisdiction.			
		· · · · · · · · · · · · · · · · · · ·	

#### **PLUG & ABANDONMENT PROCEDURE**

December 20, 2004

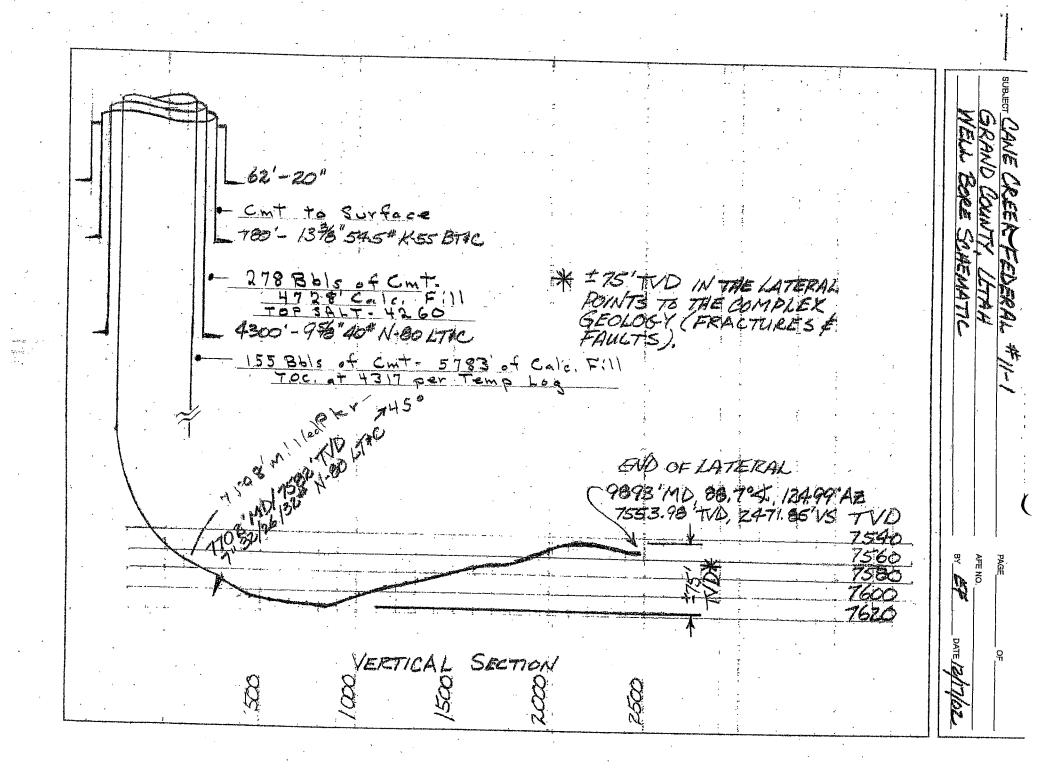
#### Cane Creek Federal #11-1

Wildcat 3766' FNL, 2322' FWL, Section 11, T-26-S, R-19-E Grand County, Utah

Note: All cement volumes use 10% excess per 1000' of depth, both inside and outside; or use 100% excess outside casing, 50' excess inside casing and 50' excess for a casing annulus, whichever is greater. The stabilizing wellbore fluid will be at least 9.5 ppg produced brine, sufficient to balance all exposed formation pressures. All cement is Class B, mixed at 15.6ppg with a 1.18 cf/sx yield for plugs below 5000' and ASTM Type III, mixed at 14.8ppg with 1.32 cf/sx yield for plugs above 5000'.

- 1. Prepare location for rig and other equipment. Access to location will need dirt work prior to rig arrival. Dig a small earthen pit for well returns and cement wash up. Test Anchors.
- MOL and RU daylight pulling unit. Conduct safety meeting for all personnel on location. NU relief line and blow down well; kill with produced brine as necessary. ND wellhead and NU BOP. Test BOP. Comply with all UDOGM, BLM, and Intrepid safety rules and regulations.
- 3. TOH and LD 1 joint 2.875" tubing. PU and TIH with 2.875" workstring and tag existing set CIBP at 7651' (2004). Pressure test casing to 1000#. If casing does not test then, spot or tag subsequent plugs as appropriate.
- 4. Plug #1 (7" casing shoe: 7651'-7551'): Mix 26 sxs Class B cement (15.6 ppg, 1.18 cf/sx) and spot balanced plug inside casing above the CIBP to isolate the open hole interval. PUH with tubing.
- 5. Rig up a wireline unit and run CBL in the 7" casing to determine TOC.
- 6. Plug #2 (Inside 7" Casing: 5900' to 5800'): Mix 26 sxs Class B cement (15.6 ppg, 1.18 cf/sx) and spot balanced plug inside casing above the CIBP to isolate this 7" casing interval. TOH with tubing.
- 7. If the TOC is appropriate to recover some of the 7" casing then: perforate the 7" casing at top of cement. Establish circulation to surface out the 7" X 9-5/8" annulus with brine; circulate clean. ND the BOP and weld a 7" slip-on collar onto the 7" casing stub. Cut the 7" casing at perforations. Pull and LD 7" casing as possible.
- 8. Plug #3 (9-5/8" casing shoe: 4350' 4250'): Perforate 3 HSC squeeze holes 4310'. If the casing tested, then establish rate into squeeze holes. TIH and set 7" cement retainer at 4260'. Mix 47 sxs Type III cement, squeeze 24 sxs outside the 7" casing and leave 23 sxs inside casing. TOH with tubing.
- 9. **Plug #4 (7" Casing stub: 4050' 3950')**: TIH with tubing to 4050'. Mix 47 sxs Type III cement and spot balanced plug inside casing to cover the 7" casing stub. TOH with tubing.
- 10. **If unable to pull 7" casing,** or it is determined that casing recovery is not economic or feasible, then set plug #4 from 2500' to 2400' (approximately 1/2 way in between the 13-3/8" casing shoe and the 9-5/8" casing shoe). First, perforate 3 HSC holes at 2500' and establish rate into. Set a 7" cement retainer a 2450' and squeeze 24 sxs outside the 7" casing and leave 24 sxs inside. TOH with tubing.

- 11. Plug #3 (13-3/8" casing shoe, 799' 699'): Perforate 3 squeeze holes through the 7" casing. Establish circulation to the surface through the squeeze holes. TIH with tubing to 799'. Mix and pump 47 sxs Type III cement, squeeze 24 sxs into the 7" x 9-5/8" annulus to cover 13-3/8" casing shoe interval and leave 23 sxs inside 7" casing. TOH and LD remaining tubing.
- 12. **Plug #4 (Surface; 100'–Surface)**: Perforate 4 HSC squeeze holes through the 7" and 9-5/8" casings. Establish circulation to surface out the bradenhead and casing annulus. Mix and pump approximately 70 sxs type III cement down the 7" casing, circulate good cement out the bradenhead and casing annulus. WOC.
- 13. Cut off surface and production casing below ground level. Fill well with cement as necessary and install P&A marker to comply with regulations. RD, MOL, and restore location per BLM requirements.



Attention: (1) . +1.



P.O. Box 1208, Moab, Utah 84532 · Office 435-259-7171 · FAX 435-259-7100

# FAX COVER SHEET

Company: DOGM Date: 4/2/05  Fax# 801.359-3940 Page 1 of 16.  Dustin  Those these plans are acceptable.  Regarde.  Fishard Miller  cell 303-881-5440  richard, miller @intrepid patash.com  RECEIVED  APR 13 2005  DIV OF OIL, GAS & MINING	From: Kie	hard Mille
Fax# 801.359-3940 Page 1 of 16.  Dustin.  Thope there plans are accept able.  Regards.  Fishard Miller Bintrepid potash. com  RECEIVED  APR 13 2005	Company: Date: 4	2/05
Thope these plans are  acceptable.  Regards.  Field Mills.  cell 303-881-5440  richard, miller @intrepid patash, com  RECEIVED  APR 13 2005		16.
The gards.  The ga	Dustin.	
The garde.  The ga		
Fieland Miller  cell 303-881-5440  richard, miller @intrepid potash, cor  RECEIVED  APR 13 2005	accept a ble	are
richard, miller @intrepid potach, con  RECEIVED  APR 13 2005	Regards.	Beauty and the second
richard, miller @ intrepid potach, con  RECEIVED  APR 13 2005	Trekord Miller	
RECEIVED APR 1 3 2005	richard, miller @ interes	1-1-
APR 1 3 2005		A POTAFR, CON
APR 1 3 2005	·	
APR 1 3 2005		RECENT
DIV. OF OIL, GAS & MINING		APR 12 2005
S ST SIT, GAS & MINING		DIV. OF OIL CAS S
		GAS & MINING

### CONFIDENTIALITY CAUTION

This message is intended only for the use of the individual or entity to which it is addressed and contains information that is privileged and confidential. If the reader of this message is not the intended recipient, or the employee or opent responsible for delivering the message to the intended recipient, you are hereby notified that any dimenination, distribution or copying of this communication is strictly prohibited. If you have received this communication in error, please notify us immediately by telephone and return the original message to us at the above address at our cost.

		UNITED STAT				PORM	NPROVED OM B No. 1004.0	M87
DEPARTMENT OF THE INTERIOR  BUREAU OF LAND MANAGEMENT						1	Depires March 31, 2007	_
SUNDRY NOTICES AND REPORTS ON WELLS					Ö. LOBBO SA		•	
. 8	o not use this fon	n for proposals to	drill or	O COLO VVILLES		UTU-659	<del></del>	
ab	andoned well. Us	e Form 3180-3 (A.	PD) for si	SCh proposis			Allatice or Tribe Name	
1. Type of Well			-7.010	on proposes		N/		
OILWELL [X] GAS WELL []	OTHER		1			1	CA/Agreement, Name an	d/or #
2. Name of Operator	Intrepld Oil and	Gas LLC				a. Well Nam	ook Federal	
						11-1	W 300 (40,	
3a. Address	700 17th Street,	Suite 1700	-	3b. Phone N	lo. (Include ères code	9. API Well I		
	Denver CO 8020			303-256-150	•	43-019-31		
4. Location of Well (Footage, Sec., T., R.,		· · · · · · · · · · · · · · · · · · ·					Ool, or Exploratory Area	
2220' FNL & 2		Projected Botto	m Hole L	ocation (estimate	nd)	Wildcat	ON OF EXPOSEINTY AVER	
SENW, Sec. 11	, 7-26-3, R-19-E			Sec. 11, 7-26-5, I			r Parlett, Stale	
				•		Grand Co	· · · · · ·	
12. CH	ECK APPROPRIA	TE BOX(ES) TO IN	IDIÇATE	NATURE OF NOT	ICE, REPORT, OR OT	HER DATA		
TYPE OF SUBMISSION	TYPE OF ACTIO	N						
0 a an-man	[ ] Addize	[ ) Doopen	[]Produc	ion (Staniflesuma)	[ ] Water Shut-Off			
[ ] Notice of Intent	[ ] Alter Casing	[ ] Fracture Tree!	[]Reclar	≱¶on	[ ] Well Integrity			
[ ] Subsequent Report	[ ] Casing Repair	[ ] New Construction	[ ] Recom	ploto	[] Other			
[X] Final Abandonment Notice	[ ] Change Plans	[ ] Plug and Abendon	[×] Temps	rarily Abendon				
	[ ] Convert to Injection	[ ] Flug Back	[ ] Water D	liopaumi				
determined that the alto is needy for final Request pern	nission to Abano	don the above v	vell ner:	the ettached no	aaadura		· :	
, ,			voii pei	ne attached pro	oceans		V*	
		tha	2 2 2 3 2	2				٠.
	Accept	ed by the					<u> </u>	RECEIVED HOMB FIELD OFFI
	i Itah D	ted by the Division of			pproval Of This		SEAU BEC	ಹ್ಕ
	Oil Gas	and Minin	g	Federal A	Is Necessary		C 2	四空
	U,,, U	15.7		Action	12 14000	1141m	~~ <b>∓</b> ′3′	<u></u>
L.	ste: 4/15	103		·			<i>&gt;</i> ⇒	<b>□</b>
	IN TO A	Mul		_ COM	SENT TO OPERATOR	ķ.		<u> </u>
	iy: 1/241	10010		្នំ ាំងរ	4-18-05	ř	32 <del>=</del>	$\Xi$
				المُلك الله	LHO	4 €	<b>製品 w</b>	E
I hearty out the day to the same of the sa							-3.7° (J)	
<ul> <li>I have by cardily that the toregoing is true to Name (Printed/Typed) Richard IV</li> </ul>		ı	_	3 PO-6 C	Dan Line Laborate - month	<u> </u>		
· · · · · · · · · · · · · · · · · · ·			Title	Dec	LLOC- 1	rer		
Signatura	Niee.			$n$ $n \sim 1$	1/24	9		
		PACE FOR FE	Dale	OP STATE OF	FICE UPS			
proved By:	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	4		UK SIAIE UF				
- (freeth)	, Jones		TWO THE		Date		3.11.5	
anditions of approval, if any, are attached	provol of this notice do		Office	Assistant	Field 12g	er.		_
rify that the applicant holds legal or equital				Division	of Resource	~ ·,	•	
ich would aniitie the applicant to annuuct o				- 1710IQII	or resource	•		
la 18 U.S.C. Section 1001 and 176e 43 U.S	Ć Section 1212 mate t	1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0				_		_

CONDITIONS OF APPROVAL ATTACHED APR 1 3 2005

Notice of Intent to Abandon Intrepid Oil and Gas, LLC Cane Creek Federal #11-1 Lease U-65972 Section 11, T26S, R19E Grand County, Utah

#### **CONDITIONS OF APPROVAL**

- 1. Notify Jack Johnson (435-259-2129) of the BLM Moab Field Office at least 24-hours prior to starting plugging operations.
- 2. Within 30-days of plugging the well, submit a subsequent report of abandonment on a sundry notice (Form 3160-5). The report should describe all work that was done, including cement volumes, plug depths, etc.
- 3. Should you have any questions regarding this approval, please call Eric Jones (435-259-2117) of the BLM Moab Field Office.
- 4. Any questions regarding surface reclamation may be directed to Rich McClure (435-259-2127) of the BLM Moab Field Office.

#### **PLUG & ABANDONMENT PROCEDURE**

December 20, 2004

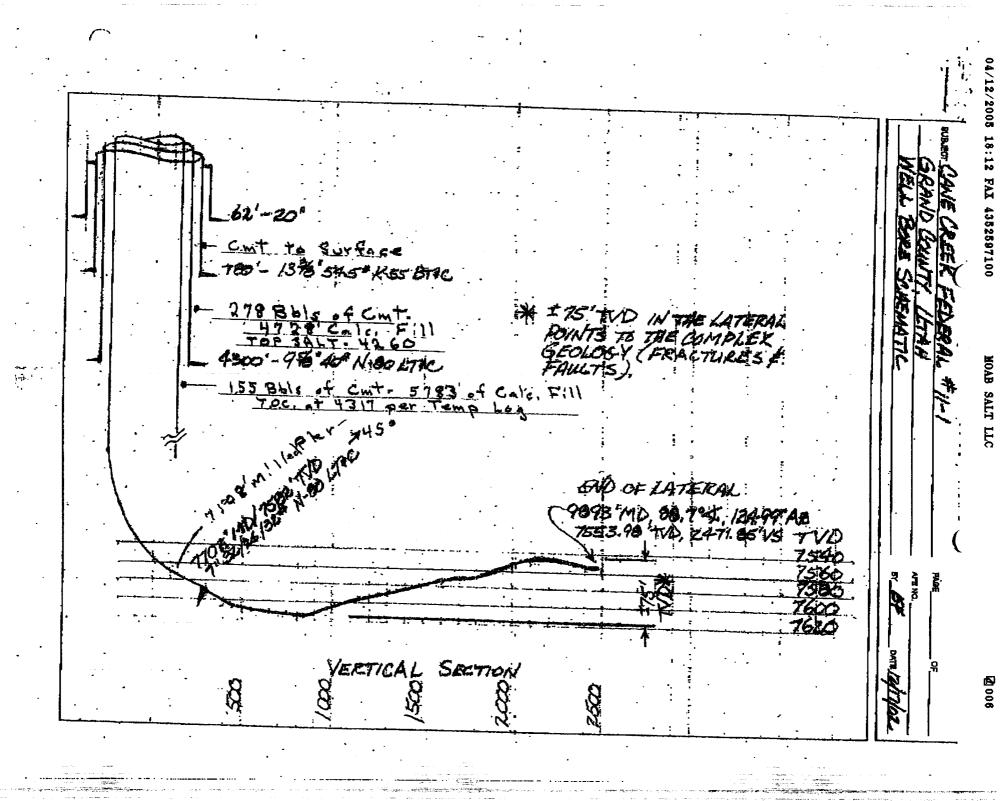
#### Cane Creek Federal #11-1

Wildcat
3766' FNL, 2322' FWL, Section 11, T-26-S, R-19-E
Grand County, Utah

Note: All cement volumes use 10% excess per 1000' of depth, both inside and outside; or use 100% excess outside casing, 50' excess inside casing and 50' excess for a casing ennulus, whichever is greater. The stabilizing wellbore fluid will be at least 9.5 ppg produced brine, sufficient to balance all exposed formation pressures. All cement is Class B, mixed at 15.6ppg with a 1.18 cf/sx yield for plugs below 5000' and ASTM Type III, mixed at 14.8ppg with 1.32 cf/sx yield for plugs above 5000'.

- Prepare location for rig and other equipment. Access to location will need dirt work prior to rig arrival. Dig a small earthen pit for well returns and carment wash up. Test Anchors.
- MOL and RU daylight pulling unit. Conduct safety meeting for all personnel on location. NU relief line and blow down well; kill with produced brine as necessary. ND wellhead and NU BOP. Test BOP. Comply with all UDOGM, BLM, and Intropid safety rules and regulations.
- TOH and LD 1 joint 2.875" tubing. PU and TIH with 2.875" workstring and tag existing set CIBP at 7651' (2004). Pressure test casing to 1000#. If casing does not test then, spot or tag subsequent plugs as appropriate.
- 4. Plug #1 (7" casing shoe: 7651'-7551'): Mix 26 sxs Class 6 cement (15.6 ppg, 1.18 cf/sx) and spot balanced plug inside casing above the CIBP to isolate the open hole interval. PUH with tubing.
- 5. Rig up a wireline unit and run CBL in the 7" casing to determine TOC.
- 6. Plug #2 (Inside 7" Casing: 5900' to 5800'): Mix 26 exs Class B cement (15.6 ppg, 1.18 cf/sx) and spot balanced plug inside casing above the CIBP to isolate this 7" casing interval. TOH with tubing.
- 7. If the TOC is appropriate to recover some of the 7" casing then; perforate the 7" casing at top of cement. Establish circulation to surface out the 7" X 9-5/8" annulus with brine; circulate clean. ND the BOP and weld a 7" slip-on collar onto the 7" casing stub. Cut the 7" casing at perforations. Pull and LD 7" casing as possible.
- 8. Plug #3 (9-5/8" casing shoe: 4350' 4250'); Perforate 3 HSC squeeze holes 4310'. If the casing tested, then establish rate into squeeze holes. TiH and set 7" cement retainer at 4260'. Mix 47 sxs Type III cement, squeeze 24 sxs outside the 7" casing and leave 23 sxs inside casing. TOH with tubing.
- 9. Plug #4 (7" Casing stub: 4050' 3950'): TIH with tubing to 4050'. Mix 47 sxs Type III cement and spot balanced plug inside casing to cover the 7" casing stub. TOH with tubing.
- 10. If unable to pull 7" casing, or it is determined that casing recovery is not economic or feasible, then set plug #4 from 2500' to 2400' (approximately 1/2 way in between the 13-3/8" casing shoe and the 9-5/8" casing shoe). First, perforate 3 HSC holes at 2500' and establish rate into. Set a 7" cement retainer a 2450' and equeeze 24 axs outside the 7" casing and leave 24 axs inside. TOH with tubing.

- 11. Plug #3 (13-3/8" casing shoe, 799' 699'): Perforate 3 squeeze holes through the 7" casing. Establish circulation to the surface through the squeeze holes. TIH with tubing to 799'. Mix and pump 47 sxs Type III cement, squeeze 24 sxs into the 7" x 9-5/8" annulus to cover 13-3/8" casing shoe interval and leave 23 sxs inside 7" casing. TOH and LD remaining tubing.
- 12. Plug #4 (Surface; 100'-Surface): Perforate 4 HSC squeeze holes through the 7" and 9-5/8" casings. Establish circulation to surface out the bradenhead and casing annulus. Mix and pump approximately 70 axs type III cement down the 7" casing, circulate good cement out the bradenhead and casing annulus. WOC.
- 13. Cut off surface and production casing below ground level. Fill well with cement as necessary and install P&A marker to comply with regulations. RD, MOL, and restore location per BLM requirements.



submitted in lieu of Form 3160-5

#### **UNITED STATES** DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT**

Sundry Notices and Reports on Wells

COPY

	5.	Lease Number UTU-65972
	6.	If Indian, All. or
1. Type of Well	0.	Tribe Name
		N/A
Oil Well	<b>-7</b>	Unit Agreement Name
	<del></del> 7.	Cane Creek Unit
2. Name of Operator		Carle Creek Offic
Intrepid Oil & Gas LLC	0	Well Name & Number
	<u> </u>	Cane Creek Fed #11-1
3. Address & Phone No. of Operator	•	API Well No.
700 17 <sup>th</sup> Street, Suite 1700, Denver, Colorado, 80202	9.	
	<del></del>	43-019-31364-00
4. Location of Well, Footage, Sec., T, R, M	10.	Field and Pool
T. Modulion of the state of the		Wildcat
3766' FNL and 2322' FWL, Section 11, T-26-S, R-19-E	11.	County & State
0100 1112 4.10 2000 7		Grand County, Utah
·		
12. CHECK APPROPRIATE BOX TO INDICATE NATURE OF N	IOTICE, REPORT, OTHER D	DATA
Type of Submission Type of Action		
Notice of Intent X Abandonment	Change of Plans	
Recompletion	New Construction	
	Non-Routine Fracturing	
X Subsequent Report Plugging Back Casing Repair	Water Shut off	
	Conversion to Injection	
Final Abandonment Altering Casing Other -		
Other -		
" D Completed Operations		
13. Describe Proposed or Completed Operations		
	He a standard report	
This well was plugged and abandoned on May 18, 2005 pe	er the attached report.	•
14. I hereby certify that the foregoing is true and coffect.	30. D. Miller	Intrepid
14. Thereby certify that the loregoing is	( white of	•
71/11 YU/2 V2.		
SIGNATURE PROCESSION TO THE SIGNATURE	(1)	
William F. Clark		
0.1.00		
(This space for Federal or State Office use)		Date
APPROVED BY		
CONDITION OF APPROVAL, if any:		

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

# A-PLUS WELL SERVICE, INC.

P.O. BOX 1979 Farmington, New Mexico 87499 505-325-2627 \* fax: 505-325-1211

Intrepid Oil and Gas LLC Cane Creek Federal #11-1 May 23, 2005 Page 1 of 2

3766' FNL & 2322' FWL, Section 11, T-26-S, R-19-E Grand County, UT Lease Number: UTU-65972 API #43-019-31364

Plug & Abandonment Report

#### **Work Summary:**

Notified Moab BLM on 4-20-05

5/13/05 MOL and RU rig. Lay relief lines to pit. Travel to Farmington.

5/16/05 Well pressures: 0#. ND wellhead. NU BOP, test. TIH and round trip wireline gauge ring to 7200'. TIH with 221 joints tubing and tag sub to 6990'. Load casing with 4 bbls of water and pressure test to 1000#, held OK. Procedure change approved by Jack Johnson with BLM to set plug at 6990'; because well is full of barite settled from mud. Plug #1 with 29 sxs Type III cement (38 cf) inside casing from 6990' to 6820' to isolate the open hole interval.

PUH to 5914'.

Plug #2 with 29 sxs Type III cement (38 cf) inside casing from 5914' up to 5755' to isolate the 7" casing interval.

PUH to 4238'. Shut in well and WOC overnight.

5/17/05 Well pressures: zero. RU wireline unit and perforate 3 holes at 4310'. Load casing with 18 bbls of water. Attempt to establish rate into squeeze holes, casing pressured up to 2000#. BLM required another perforation 20' higher. Perforate 3 holes at 4290'. Attempt to establish rate into squeeze holes, pressured up to 2000#. BLM required another perforation 30' higher. Perforate 3 holes at 4260'. Attempt to establish rate into squeeze holes, pressured up to 2000#. Johnson, BLM, approved procedure change to spot inside plug.

TIH with tubing to 4365', 55' below the first set of squeeze holes.

Plug #3 with 31 sxs Type III cement (41 cf) inside the casing from 4365' to 4160' to cover the 9.625" casing shoe and three sets of squeeze holes.

TOH with tubing. Perforate 3 holes at 2500'. Attempt to establish rate, pressured up to 2000#. Jack Johnson with BLM approved procedure change to spot inside plug. TIH with tubing to 2562'.

Plug #4 with 32 sxs Type III cement (42 cf) inside the casing from 2562' up to 2350' to isolate formations. TOH with tubing.

Perforate 3 holes at 799'. Establish circulation out of the 7" x 9.625" annulus to surface. TIH with tubing to 759'.

Plug #5 with 52 sxs Type III cement (69 cf): 1st spot all the cement inside the 7" casing; 2<sup>nd</sup> TOH and LD all tubing; 3<sup>rd</sup> load casing and squeeze 25 sxs into the 7" x 9.625" casing annulus to cover the 13.375" casing shoe; 4th leave 27 sxs inside the 7" casing up to 623'.

Perforate 3 holes at 100'. Dig out cellar down to valve on 20" conductor pipe. Replace valve. Shut in well. SDFN.

### A-PLUS WELL SERVICE, INC.

P.O. BOX 1979

Farmington, New Mexico 87499 505-325-2627 \* fax: 505-325-1211

Intrepid Oil and Gas LLC
Cane Creek Federal #11-1

May 23, 2005 Page 2 of 2

#### Work Summary - Continued:

5/18/05 Well pressures: zero. Establish circulation out the 7" x 9.625" intermediate casing annulus (IMCA) to surface with 70 bbls of water. Then shut in IMCA valve and establish circulation out of the 9.625" x 13.375" bradenhead annulus with 85 bbls of water.

**Plug #6** with 145 sxs Type II cement (191 cf) pumped down the 7" casing from 100' to surface, circulate good cement out the intermediate casing annulus and out the bradenhead valve.

ND BOP. Dig out and cut off wellhead. Install underground P&A marker.

RD & MOL.

Charlie Harrison, Intrepid, was on location.

Jack Johnson, BLM, was on location.

# A - PLUS WELL SERVILE, INC.

## P.O. BOX 1979 FARMINGTON, NM 87499 505-325-2627 • FAX: 505-325-1211

# PLUGGING CONTROL WORKSHEET

Company: Intrepid	Start Work: <u>5 - 13 - 05</u>
Well Name: CANE Creek #11-1	Job Complete: <u>5-18-05</u>
Purpose: To compare Proposed Plugging Pl	lan (Sundry Procedure) To Actual Work
Complete For Each Plug Set:	***********
Date and Time Plug Set:	#:00 pm   Initials: _DcB  Actual Work Done:  Plug # _ /  From: _6.990' To: _6920'  With: _29
Changes Approved By (Include Time and Dal	ie): Jack Johnson BLm
Sundry Procedure:  Plug #2  From: 5900 To: 5600  With:6 sxs cement  Perforate: No or at  CIBP: No or at  Cement Rt: No or at	CIBP set at:; sxs Under sxs Above; sxs Into Annulus
Does Procedure and Actual Agree ? Yes If No, Why Changes?	No
Changes Approved By (Include Time and Dat	e):
Plug # 3 From: 43/0 To: 42/0 With: 47 sxs cement Perforate: No or at 43/0 CIBP: X No or at 4260  Does Procedure and Actual Agree? Yes	Actual Work Done:  Plug # _ 3  From: 4365
If No, Why Changes? <u>CASING</u> <u>Press</u> Changes Approved By (Include Time and Date	1) JACK JOHNSON BLM
*************	***************

# A - PLUS WELL SERVILE, INC.

P.O. BOX 1979 FARMINGTON, NM 87499 505-325-2627 • FAX: 505-325-1211

## PLUGGING CONTROL WORKSHEET

Company: Tutrepid	Start Work: 5-13-05
Well Name: CANE Creek Fed	//-/ Job Complete: <u>5-/8-05</u>
Purpose: To compare Proposed Plugging F	Plan (Sundry Procedure) To Actual Work
Complete For Each Plug Set:	**************************************
Date and Time Plug Set: 5-/7-05  Sundry Procedure:  Plug #_ 4/  From: 2500 To: 2400  With: 4/  Perforate: No or at 2500  CIBP: X/  Cement Rt: No or at 2450  Does Procedure and Actual Agree? Yes	3:30 pm   Initials: <u>h c 8</u>
Changes Approved By (Include Time and Da	
Date and Time Plug Set: _5-/7-05 Sundry Procedure: Plug # _5 From: 799	Initials: DCB
Does Procedure and Actual Agree ? Yes If No, Why Changes?	No
	***************************************
Date and Time Plug Set: 5-18-05  Sundry Procedure:  Plug # 6  From: 100 To: 3011  With: 70 sxs cement  Perforate: No or at 100  CIBP: No or at 100  Cement Rt: No or at 100  Does Procedure and Actual Agree? Yes  If No, Why Changes?	Cement Rt set at: ; sxs Under sxs Above; sxs Into Annulus No
Changes Approved By (Include Time and Da	[e); *************